Mintec, inc.

# GAMMON LAKE RESOURSES INC. OCAMPO DEPOSIT MINERAL RESOURCES & RESERVES TECHNICAL REPORT – JANUARY 2006

#### PREPARED BY:

Abdullah Arik – Senior Resource Consultant Fred Fest – Senior Project Engineer

Mintec, Inc 3544 East Fort Lowell Tucson, Arizona 85716

## **SUBMITTED TO:**

John C. Thornton, COO Gammon Lake Resources Inc. 3443 North Campbell Ave Tucson, AZ 85716 USA

# **TABLE OF CONTENTS**

| 1.0 Summary  |    |
|--|----|
| 2.0 Introduction and Terms of Reference                                      | 8  |
| 2.1 Important Notice to Readers  | 8  |
| 3.0 Disclaimer   | 9  |
| 4.0 Property Description and Location  | 10 |
| 4.1 Location   |    |
| 4.2 Mineral Tenure   | 11 |
| Expiration   | 11 |
| 4.3 Permits and Agreements   | 14 |
| 4.4 Environmental Issues   |    |
| 5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography | 15 |
| 5.1 Access   |    |
| 5.2 Climate  | 15 |
| 5.3 Local Resources  | 15 |
| 5.4 Infrastructure   | 15 |
| 5.5 Physiographic  | 16 |
| 6.0 History  |    |
| 7.0 Geologic Setting   |    |
| 7.1 Regional Geology   |    |
| 7.2 Ocampo District Geology  |    |
| 8.0 Deposit Types  |    |
| 9.0 Mineralization   |    |
| 10.0 Exploration   | 29 |
| 11.0 Drilling  |    |
| 12.0 Sampling Method and Approach  |    |
| 12.1 Surface Samples   |    |
| 12.2 Underground Samples   |    |
| 12.3 Surface Ore Stockpile Samples   |    |
| 12.4 RC Samples  |    |
| 12.5 Core Samples  |    |
| 13.0 Sample Preparation, Analyses and Security                               |    |
| 13.1.1 Exploration drilling and sampling                                     |    |
| 13.1.2 Grade control and underground development samples                     |    |
| 13.2 Analyses  |    |
| 13.3 Security  |    |
| 13.4 Bulk Density  |    |
| 14.0 Data Verification   |    |
| 15.0 Adjacent Properties   |    |
| 16.0 Mineral Processing and Metallurgical Testing                            | 36 |
| 17.0 Mineral Resource and Mineral Reserve Estimates                          |    |
| 17.1 General   |    |
| 17.2 Geographical Area Model Division  |    |
| 17.3 Data Analysis   |    |
| 17.3.1 General   |    |

| 17.3.3 Evaluation of Outlier Grades       39         17.3.4 Gold-Silver Grade Correlations       39         17.3.5 Composite Data Statistics       40         17.3.6 Variography       40         17.3.7 Cross Validation       41         17.3.8 Interpolation Parameters       42         17.4 Model Development for NE Area and PGR Trend       50         17.4.1 Northeast Area       50         17.4.2 The PGR Trend       51         17.5 Grade Estimation       52         17.6 Validation       53         17.7 Mineral Resources       53         17.8 Mineral Reserves       55         18.0 References       58 | 17.3.2 Assay Data Statistics and Log-probability Plots |    |
|--|--|----|
| 17.3.5 Composite Data Statistics       40         17.3.6 Variography       40         17.3.7 Cross Validation       41         17.3.8 Interpolation Parameters       42         17.4 Model Development for NE Area and PGR Trend       50         17.4.1 Northeast Area       50         17.4.2 The PGR Trend       51         17.5 Grade Estimation       52         17.6 Validation       53         17.7 Mineral Resources       53         17.8 Mineral Reserves       55  | 17.3.3 Evaluation of Outlier Grades                    | 39 |
| 17.3.6 Variography       40         17.3.7 Cross Validation       41         17.3.8 Interpolation Parameters       42         17.4 Model Development for NE Area and PGR Trend       50         17.4.1 Northeast Area       50         17.4.2 The PGR Trend       51         17.5 Grade Estimation       52         17.6 Validation       53         17.7 Mineral Resources       53         17.8 Mineral Reserves       55  | 17.3.4 Gold-Silver Grade Correlations                  | 39 |
| 17.3.7 Cross Validation       41         17.3.8 Interpolation Parameters       42         17.4 Model Development for NE Area and PGR Trend       50         17.4.1 Northeast Area       50         17.4.2 The PGR Trend       51         17.5 Grade Estimation       52         17.6 Validation       53         17.7 Mineral Resources       53         17.8 Mineral Reserves       55  | 17.3.5 Composite Data Statistics                       | 40 |
| 17.3.7 Cross Validation       41         17.3.8 Interpolation Parameters       42         17.4 Model Development for NE Area and PGR Trend       50         17.4.1 Northeast Area       50         17.4.2 The PGR Trend       51         17.5 Grade Estimation       52         17.6 Validation       53         17.7 Mineral Resources       53         17.8 Mineral Reserves       55  | 17.3.6 Variography                                     | 40 |
| 17.4 Model Development for NE Area and PGR Trend       50         17.4.1 Northeast Area       50         17.4.2 The PGR Trend       51         17.5 Grade Estimation       52         17.6 Validation       53         17.7 Mineral Resources       53         17.8 Mineral Reserves       55  | 17.3.7 Cross Validation                                | 41 |
| 17.4.1 Northeast Area       50         17.4.2 The PGR Trend       51         17.5 Grade Estimation       52         17.6 Validation       53         17.7 Mineral Resources       53         17.8 Mineral Reserves       55  | 17.3.8 Interpolation Parameters                        | 42 |
| 17.4.1 Northeast Area       50         17.4.2 The PGR Trend       51         17.5 Grade Estimation       52         17.6 Validation       53         17.7 Mineral Resources       53         17.8 Mineral Reserves       55  | 17.4 Model Development for NE Area and PGR Trend       | 50 |
| 17.5 Grade Estimation       52         17.6 Validation       53         17.7 Mineral Resources       53         17.8 Mineral Reserves       55   |  |    |
| 17.6 Validation5317.7 Mineral Resources5317.8 Mineral Reserves55   | 17.4.2 The PGR Trend                                   | 51 |
| 17.7 Mineral Resources5317.8 Mineral Reserves55  |  |    |
| 17.8 Mineral Reserves55  | 17.6 Validation  | 53 |
|  | 17.7 Mineral Resources                                 | 53 |
| 18.0 References  | 17.8 Mineral Reserves                                  | 55 |
|  | 18.0 References  | 58 |

| Figure 4.1 – Location Map   | 10 |
|---|----|
| Figure 4.2 - Property Map   |    |
| Figure 5.1 - Is a photo showing the pueblo of Ocampo and the surrounding area | 16 |
| Figure 6.1 – 3D District Map  | 19 |
| Figure 7.1 - Regional Geology Map   | 21 |
| Figure 7.2 - Stratigraphic Column   | 23 |
| Figure 7.3 - District Geology   | 25 |
| Figure 17.1 - Probability plot of Au assays – Zone 1-2                        | 44 |
| Figure 17.2 - Probability plot of Ag assays – Zone 1-2                        | 44 |
| Figure 17.3 - Scatter plot of Au vs Ag assays – Zone 1                        | 45 |
| Figure 17.4 - Scatter plot of Au vs Ag assays –Zone 2                         | 45 |
| Figure 17.5 - Statistics and histogram of Au composites— Zone 1-2             | 47 |
| Figure 17.6 - Statistics and histogram of Ag composites— Zone 1-2             |    |
| Figure 17.7 - Au variogram contours on the horizontal plane – Zone 1-2        | 48 |
| Figure 17.8 – Ag variogram contours on the horizontal plane – Zone 1-2        | 48 |
| Figure 17.9 – Au directional variograms and the spherical model fit           | 49 |
| Figure 17.10 - Ag directional variograms and the spherical model fit          | 49 |
|   |    |
| Table 1.1 – Ocampo District Mineral Resource Summary                          |    |
| Table 1.2 – PGR Open Pit Area Reserves  |    |
| Table 4.1 Gammon Lake Mining Titles   |    |
| Table 7.1 – Summary of Deformation, Kinematics and Mineralization             |    |
| Table 11.1. Drilling by Company   |    |
| Table 17.1 - Statistics of Au assays at different cutoffs                     |    |
| Table 17.2 - Statistics of Ag assays at different cutoffs                     |    |
| Table 17.3 - Statistics of 3-m Au composites by Zone                          |    |
| Table 17.4 - Statistics of 3-m Ag composites by Zone                          |    |
| Table 17.5 - Spherical variogram model parameters for Au and Ag               |    |
| Table 17.6 – Ocampo District Mineral Resource Summary                         |    |
| Table 17.7 – PGR Open Pit Area Reserves                                       |    |
| Table 17.8 – PGR Open Pit Area Incremental Reserves                           |    |
| Table 17.9 – Northeast Area Proven and Probable Reserves                      | 57 |
|   |    |
| Table 17.10 – Ocampo Proven and Probable Reserves                             |    |

# 1.0 Summary

The revised mineral resources for the December 2005 technical submission under NI 43-101 follows:

The updated resource calculation, as illustrated in the tables below, contains 2.876-million gold ounces and 133.368-million silver ounces in the measured and indicated categories and a further 2.950-million gold ounces and 161.885-million silver ounces in the inferred category. On a gold-equivalent basis, the updated resource at the Ocampo Project contains approximately 5.097-million ounces in the measured and indicated categories and 5.687-million ounces in the inferred category.

**Table 1.1 – Ocampo District Mineral Resource Summary** 

| Total Ocampo Mineral Resources |               |                 |                             |            |                |                  |                           |  |
|--------------------------------|---------------|-----------------|-----------------------------|------------|----------------|------------------|---------------------------|--|
| Project Area                   | Gold<br>(gpt) | Silver<br>(gpt) | Gold<br>Equivalent<br>(gpt) | Tonnes     | Gold<br>Ounces | Silver<br>Ounces | Gold Equivalent<br>Ounces |  |
|                                |               |                 |                             |            |                |                  |                           |  |
| Northeast Area Measures        | 5.47          | 242             | 9.50                        | 1,529,000  | 269,000        | 11,911,000       | 468,000                   |  |
| Open Pit Area Measured         | 0.79          | 36              | 1.39                        | 38,330,000 | 974,000        | 44,369,000       | 1,713,000                 |  |
| Total Measured                 | 0.97          | 44              | 1.70                        | 39,859,000 | 1,243,000      | 56,280,000       | 2,181,000                 |  |
|                                |               |                 |                             |            |                |                  |                           |  |
| Northeast Area Indicated       | 4.10          | 197             | 7.40                        | 3,389,000  | 447,000        | 21,438,000       | 802,000                   |  |
| Open Pit Area Indicated        | 0.91          | 43              | 1.62                        | 40,532,000 | , ,            | 55,650,000       | 2,114,000                 |  |
| Total Indicated                | 1.16          | 55              | 2.10                        | 43,921,000 | 1,633,000      | 77,088,000       | 2,916,000                 |  |
|                                |               |                 |                             |            |                |                  |                           |  |
| Total Measured and Indicated   | 1.07          | 50              | 1.90                        | 83,780,000 | 2,876,000      | 133,368,000      | 5,097,000                 |  |
|                                |               |                 |                             |            |                |                  |                           |  |
| Northeast Area Inferred        | 4.26          | 234             | 7.90                        | 13,556,000 | 1,870,000      | 99,820,000       | 3,573,000                 |  |
| Open Pit Area Inferred         | 2.13          | 122             | 3.81                        | 15,769,908 | 1,080,000      | 62,065,000       | 2,114,000                 |  |
| Total Inferred                 | 3.13          | 172             | 6.00                        | 29,325,908 | 2,950,000      | 161,885,000      | 5,687,000                 |  |

The above was calculated using gold-equivalent cutoff grades of 3.0 g/t for Northeast underground and 0.2 g/t for open-pit area. Gold-equivalent values are based on 60 grams of silver = 1 gram of gold, calculated on a gold price of US \$450 and a silver price of US \$7.50. Note also that the numbers in the table may not tally perfectly due to rounding.

The proven and probable reserves of the open pit area are shown in the table below.

**Table 1.2 – PGR Open Pit Area Reserves** 

|                           | Proven and Probable Reserves at the Open Pit Area |              |           |            |                |                  |               |  |
|---------------------------|---|--------------|-----------|------------|----------------|------------------|---------------|--|
|                           | Gold (apt)  | Silver (gpt) | eAu (gpt) | Tonnes     | Gold<br>Ounces | Silver<br>Ounces | eAu<br>Ounces |  |
|                           | <u> </u>  | (960)        | (gp./)    |            |                |                  |               |  |
| Proven Reserves           |   |              |           |            |                |                  |               |  |
| Low-Grade Open Pit        | 0.24  | 8            | 0.4       | 19,370,000 | 149,000        | 5,232,000        | 236,000       |  |
| High-Grade Open Pit       | 1.73  | 83           | 3.1       | 13,775,000 | 766,000        | 36,673,000       | 1,379,000     |  |
| Probable Reserves         |   |              |           |            |                |                  |               |  |
| Low-Grade Open Pit        | 0.22  | 8            | 0.4       | 10,199,000 | 72,000         | 2,755,000        | 118,000       |  |
| High-Grade Open Pit       | 1.73  | 80           | 3.1       | 14,385,000 | 800,000        | 37,003,000       | 1,417,000     |  |
| Total Proven and Probable | 0.96  | 44           | 1.7       | 57,729,000 | 1,788,000      | 81,753,000       | 3,151,000     |  |

The potential incremental measured and indicated resources below the above reserves are shown in the table below.

Table 1.3 – PGR Open Pit Area Incremental Resources

| Remaining  | Remaining Measured and Indicated Resource |        |       |           |  |         |           |         |  |  |
|------------|---|--------|-------|-----------|--|---------|-----------|---------|--|--|
|            | Gold                                      | Silver | eAu   | Tannaa    |  | Gold    | Silver    | eAu     |  |  |
|            | (gpt)                                     | (gpt)  | (gpt) | Tonnes    |  | Ounces  | Ounces    | Ounces  |  |  |
|            |   |        |       |           |  |         |           |         |  |  |
| Measured   | 0.35                                      | 19     | 0.7   | 1,667,000 |  | 19,000  | 1,038,000 | 36,000  |  |  |
| Indicated  | 0.62                                      | 40     | 1.3   | 4,389,000 |  | 87,000  | 5,642,000 | 181,000 |  |  |
| Total Meas | 0.55                                      | 34     | 1.1   | 6,056,000 |  | 106,000 | 6,680,000 | 217,000 |  |  |

January, 2006

The proven and probable reserves for the northeast and open pit areas are shown in the tables below.

**Table 1.4 – Northeast Area Proven and Probable Reserves** 

|                             | Gold<br>(g/t) | Silver<br>(g/t) | Gold<br>Equivalent<br>(g/t) | Tonnes    | Gold<br>Ounces | Silver<br>Ounces | Gold<br>Equivalent<br>Ounces |
|-----------------------------|---------------|-----------------|-----------------------------|-----------|----------------|------------------|------------------------------|
| Proven Reserves             |               |                 |                             |           |                |                  |                              |
| Northeast Underground       | 4.70          | 220             | 8.4                         | 1,569,000 | 237,000        | 11,052,000       | 421,000                      |
| Probable Reserves           |               |                 |                             |           |                |                  |                              |
| Northeast Underground       | 4.38          | 219             | 8.0                         | 2,385,000 | 336,000        | 16,778,000       | 616,000                      |
| _                           |               |                 |                             |           |                |                  |                              |
| Total Northeast Underground | 4.51          | 219             | 8.2                         | 3,954,000 | 573,000        | 27,830,000       | 1,037,000                    |

**Table 1.5 – Ocampo Proven and Probable Reserves** 

| Ocampo Proven & Probable Reserves |       |        |            |            |           |             |            |  |
|-----------------------------------|-------|--------|------------|------------|-----------|-------------|------------|--|
|                                   |       |        | Gold       |            |           |             | Gold       |  |
| Project Area                      | Gold  | Silver | Equivalent | Tonnes     | Gold      | Silver      | Equivalent |  |
|                                   | (g/t) | (g/t)  | (g/t)      |            | Ounces    | Ounces      | Ounces     |  |
| Northeast Area                    | 4.51  | 219    | 8.2        | 3,954,000  | 573,000   | 27,830,000  | 1,037,000  |  |
| Open Pit Area High Grade          | 1.73  | 81     | 3.1        | 28,160,000 | 1,566,000 | 73,633,000  | 2,793,000  |  |
| Open Pit Area Low Grade           | 0.23  | 8      | 0.4        | 29,569,000 | 221,000   | 7,987,000   | 354,000    |  |
|                                   |       |        |            |            |           |             |            |  |
| Total Ocampo                      | 1.19  | 55     | 2.1        | 61,683,000 | 2,360,000 | 109,450,000 | 4,184,000  |  |

#### 2.0 Introduction and Terms of Reference

Gammon Lakes Resources (hereinafter referred to as GLR) retained Mintec, Inc (Mintec) to provide an independent mineral resource estimate and Qualified Person's review and Technical Report for the Ocampo Project in Mexico. The work entailed the estimate of the mineral resources for the two major mineralization areas. The first area is entitled the PGR trend, a 3-kilometer strike length area that in the past has hosted numerous very small mines, and could be the target of a substantial heap leach mining operation. The second area is entitled the Northeast area. This area has also hosted a number of small underground operations Mineral Reserve Definitions referred to in National Instrument (NI) 430101, Standards of Disclosure for Mineral Projects. It also involved the preparation of a technical Report as defined in NI 43-101 and in compliance with Form 43-101F1 (the 'Technical Reports'). Mr. Abdullah Arik, an employee of Mintec, served as the 'Qualified Person responsible for preparing this Technical Report. Mr. Fred Fest, an employee of Mintec, was also involved in the development of the Mineral Resource.

Information and data for the independent resource estimate were obtained from Gammon Lakes Resources personnel located in Tucson, Arizona, and from the Ocampo offices located on site in Mexico. Information and data for matters pertaining to metallurgy and processing, cost estimates, environmental, and geotechnical investigations were obtained directly from Kappes, Cassiday and Associates located in Reno Nevada, and from documents provided by Gammon Lakes Resources as required.

Pertinent geological and mining data were reviewed in sufficient detail to prepare this document. Mr. Abdullah Arik directed the mineral resource estimation work. Qualified Person assistance were provided by Mr. Dan Kappes and Bruce Furgeson of KCA, who reviewed matters pertaining to metallurgy and mineral processing (Section 16), and relevant issues pertaining to process costs. Mr. John Thornton and Gregory Liller of GLR provided the geologic interpretation of the veins and ore zones.

Mr. Arik visited the project site during December 19-21, 2005.

All units are expressed in the metric system. Gold and silver contents are expressed in grams per tonne or ounces and \$US per ounce. Unless otherwise stated, all costs in this report are expressed in United States dollars.

## 2.1 Important Notice to Readers

This report was prepared for Gammon Lakes Resources by Mintec, Inc., Independent Consultants. The quality of information, conclusions and estimates contained herein is consistent with the level of effort in Mintec, Inc.'s services and based on: I) information available at the time of preparation, ii) data supplied by outside sources and by GLR, and iii) the assumption, conditions and qualifications set forth in this report. This report

is intended to be used by Gammon Lakes Resources subject to the terms and conditions of its contract with Mintec, Inc. This contract permits Gammon Lakes Resources to file their Technical Report with the Canadian Securities regulatory Authorities pursuant to National Instrument 43-101, *Standards of Disclosure for Mineral Projects*.

#### 3.0 Disclaimer

Mintec's review of the Ocampo Project relied on the following reports, which were prepared by engineering or geological consultants:

Gammon Lake Resourses Inc. Ocampo Deposit Mineral Resources Technical Report - September 2004

Kappes, Cassiday and Associates, (June 2001), Gammon Lakes Resources – Ocampo Project

Report of Metallurgical Testwork

Kappes, Cassiday and Associates, (March 2001), Gammon Lakes Resources – Ocampo Project

Heap leach Pad and Ponds – Preliminary Design and Cost Estimate

Kappes, Cassiday and Associates, (July 2003), Gammon Lakes Resources – Northeast Ocampo Project Scoping Study – 500,000 Tonnes Per Year CCD Mill

Seegmiller International Mining, Geotechnical Consultants/Engineers (March 2001) – Ocampo Project, Chihuahua, Mexico Dr. Ben Seegmiller Preliminary Evaluation Open Pit Slope Stability *Picacho, Plaza de Gallos and Refugio Pits* 

A more detailed list of the reports used is provided in the References, Section 18 of this report. Mintec used information from these reports under the assumption that they were prepared by Qualified Persons.

It is Mintec's opinion that the above materials are prepared and presented according to Mining and Engineering Contract Industry Standard Specifications. Mintec concludes the contents are reasonably prepared and presented, the conclusions reached are prudent, and once the proposed facilities are constructed, Gammon Lakes Resources may enjoy the operating efficiencies stated.

# 4.0 Property Description and Location

## 4.1 Location

GLR's Ocampo Gold-Silver Project is located at approximately 28°12.5' Latitude and 108°25' Longitude, in the Municipio of Ocampo, State of Chihuahua, Mexico. It is approximately 235 km west southwest of the state capital Chihuahua, Chihuahua.

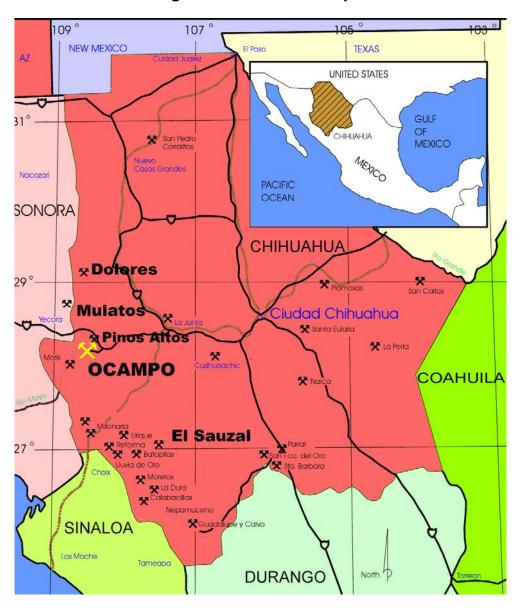


Figure 4.1 – Location Map

# **4.2 Mineral Tenure**

GLR's total holding in the Ocampo mining district consists of 44 mining titles, encompassing 3,524.54 net hectares.

**Table 4.1 Gammon Lake Mining Titles** 

| Мар# | Concession               | Number | Hectares | Expiration     |
|------|--------------------------|--------|----------|----------------|
| 1    | El Peñol                 | 214321 | 7.78     | Sept. 5, 2051  |
| 2    | El Rayo                  | 160307 | 12.00    | July 22, 2024  |
| 3    | Santo Niño               | 189284 | 19.34    | Dec. 4, 2040   |
| 4    | La Resureccion           | 185243 | 37.58    | Dec. 13, 2039  |
| 5    | La Escalera              | 218971 | 19.02    | Jan. 27, 2053  |
| 6    | Maria                    | 195211 | 8.52     | Aug. 24, 2042  |
| 7    | La Gloria                | 168685 | 108.00   | July 1, 2031   |
| 8    | San Amado                | 147733 | 46.28    | May 17, 2017   |
| 9    | El Mastuerzo             | 150528 | 9.00     | Oct. 27, 2018  |
| 10   | Nuevo Jesus Maria y Jose | 151997 | 13.69    | Nov. 11, 2019  |
| 11   | Cubiro                   | 153207 | 7.03     | July 29, 2020  |
| 12   | San Martin               | 155698 | 17.37    | Oct.27, 2021   |
| 13   | El Rayo                  | 155697 | 20.73    | Oct. 27, 2021  |
| 14   | Balvanera                | 192789 | 6.45     | Dec. 18,2041   |
| 15   | Mirasol                  | 161866 | 10.00    | July 21, 2025  |
| 16   | La Fe                    | 212201 | 39.00    | Sept. 21, 2050 |
| 17   | La Estrella              | 147793 | 9.00     | June 27, 2017  |
| 18   | Santa Ana                | 165663 | 14.26    | Nov. 27, 2029  |
| 19   | El Porvenir              | 212992 | 14.78    | Feb. 19, 2007  |
| 20   | Alejandra                | 213422 | 469.88   | May 10, 2007   |
| 21   | Alejandra Uno            | 213423 | 505.67   | May 10, 2007   |
| 22   | Alma II                  | 214374 | 0.92     | Sept. 5, 2007  |
| 23   | Alma III                 | 214375 | 4.00     | Sept. 5, 2007  |
| 24   | El Hueco                 | 189226 | 2.21     | Dec. 4, 2015   |
| 25   | Santa Juiliana           | 170141 | 10.10    | Mar. 16, 2032  |
| 26   | Rosario de Oro           | 170142 | 8.00     | Mar. 16, 2032  |
| 27   | Belen                    | 170143 | 16.00    | Mar. 16, 2032  |
| 28   | Lluvia de Oro            | 170144 | 100.00   | Mar. 16, 2032  |
| 29   | San Ramon                | 170145 | 16.00    | Mar. 16, 2032  |
| 30   | Estanislao               | 170146 | 5.67     | Mar. 16, 2032  |
| 31   | Candelaria               | 170147 | 3.99     | Mar. 16, 2032  |
| 32   | Altagracia               | 170148 | 12.00    | Mar. 16, 2032  |
| 33   | San Jose del Picacho     | 170149 | 4.59     | Mar. 16, 2032  |
| 34   | Matulera                 | 170150 | 9.47     | Mar. 16, 2032  |
| 35   | San Jose y San Juan      | 170151 | 24.74    | Mar. 16, 2032  |

| 36 | Belgrado                 | 170152 | 7.28    | Mar. 16, 2032 |
|----|--------------------------|--------|---------|---------------|
| 37 | Ampliacion de Altagracia | 170153 | 10.00   | Mar. 16, 2032 |
| 38 | Krystal                  | 204194 | 1657.92 | Dec. 17, 2046 |
| 39 | San Juan                 | 191736 | 53.91   | Dec. 18, 2041 |
| 40 | La Olvidada              | 192048 | 105.00  | Dec. 18, 2041 |
| 41 | Buenos Aires             | 212551 | 19.67   | Oct. 30, 2050 |
| 42 | Diez de Mayo             | 213571 | 23.79   | May 17, 2007  |
| 43 | El Faro                  | 217082 | 4.46    | June 13, 2008 |
| 44 | Alejandra II             | 213424 | 29.44   | May 10, 2007  |
|    |                          |        |         |               |
|    | Total Net Hectares       |        | 3524.54 | 3524.54       |

All of the concessions are exploitation concessions except the eight that have the numbers shown in red. These concessions are exploration concessions, numbers 212992, 213422-213424, 213571, 214374, 214375, 217082.

The following map shows the relative positions of the claims. The red box shows the area which has been the focus of exploration efforts to date

23,0000 22.0006 21.000E 30,0006 19.0006 18,0000 77.000E Outline of District Geology Map 14L000E 18,000E 14.0008 13,0000

Figure 4.2 – Property Map

map provided by GLR

## 4.3 Permits and Agreements

GLR currently has all the necessary permits in place to conduct exploration activities on its mining titles.

The mining titles are held by Gammon Lake de Mexico, S.A. de C.V., a wholly owned subsidiary of the Corporation (Gammon Mexico). The records show that Gammon Mexico has a 100% interest in the claims. Seventeen (17) of these claims are subject to fulfilling the Minerales de Soyopa Agreement. Seven claims that are filed free of encumbrances are subject to further payment terms under the Minera Fuerte Agreement. The details of these agreements can be found in the GLR Annual Information Filing on <a href="https://www.sedar.com">www.sedar.com</a>

#### 4.4 Environmental Issues

There are no known environmental issues that may impact the project.

## 5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography

#### 5.1 Access

The property is accessed via Federal Highway 16 a major transportation cross the northern Sierra Madre Mountains. The last 27 km of road is a government maintained gravel roads from Cahuisori. The property is 310 km by road from the city of Chihuahua. Alternatively the property can be reached from Highway 16 by a government maintained gravel road from Mycoba to Morris then east to Ocampo. (Figure 4.1 Location Map)

The State of Chihuahua has two International airports located at the cities of Ciudad Juarez and Chihuahua. Within the State there is over 4000 km of paved highway, 7,000 km of improved road.

A railhead is present at La Junta and the State of Chihuahua contains 2,100 km of railway with connections to the rail lines in the United States.

#### 5.2 Climate

Cool winters and mild summers are typical of the temperate climate in the Ocampo area. The rainfall occurs mainly during the summer monsoon season from July to September. Snow and rain occur sporadically during the winter months. The average annual precipitation is approximately 800 mm.

The Rio Mayo and several of its tributaries have year around stream bed flow and lie south, east and west of the general project area. The required water for GLR's mining operations is supplied by a combination of rainfall runoff water catchments and ground water wells.

## 5.3 Local Resources

Vegetation in the area consists of pine and mixed pine and deciduous stands of trees. There is sufficient forestation in the area to support a number of sawmills although the government has recently imposed tree harvest restrictions.

#### **5.4 Infrastructure**

The pueblo of Ocampo is in the eastern portion of the project area. It has an estimated population of 500 people and is the seat of the municipal government.

Mining and forestry are the major industries in the area. An adequate workforce that is familiar with mining is present in the region. Approximately 30% of the current workforce lives in the immediate project area. 80% live within an area including the state capital, Chihuahua (John Roberts, Ocampo General Manager).

Ocampo was connected to the national electrical grid via a 33kV power line in 2003. Normal telephone communications were established in September 2004.

The proposed power supply for the mining operations will be generated by GLR owned generators due to capital and operating costs considerations.

## 5.5 Physiographic

The Ocampo Project is within the Sierra Madre Occidental physiographic province, an incised plateau exhibiting characteristics of a youthful topography. The Project area ranges in elevation from 1,600 m to 2,200 m in elevation and is located near the eastern edge of the Barranca (canyon) country.

Figure 5.1 - Is a photo showing the pueblo of Ocampo and the surrounding area



## 6.0 History

Exploration of Northern Mexico by the Spanish started in 1554 and with the first significant mineral discovery in Chihuahua in the Santa Barbara district in 1567.

Ocampo was discovered in 1804. The initial exploration and exploitation of the Ocampo deposits between discovery and the 1830s was hampered by the Mexican War for Independence, the ensuing expulsion of the Spaniards and the lack of available capital for mine development.

Beginning in the 1830's the Mexican government began actively encouraging capital investments by English interests. This resulted in work being undertaken in the Refugio and Plaza de Gallos mines in the western part of the district. Veins in the northeast Ocampo project area were discovered shortly after in the 1840's.

In the mid 1800's the mining experienced a slow down due to the political unrest associated with the French Intervention.

In the late 1800's the government of Porfiro Diaz actively encouraged foreign investment and the development of the Ocampo mines was accelerated. From the 1880's until 1912 Ocampo had its greatest period of historical development. By the early 1900's the Green Gold-Silver Company had effectively consolidated the district. With the onset of the Mexican Revolution in 1912 mining in the Ocampo district was curtailed and restricted to small local operators.

In 1912, shortly before the Mexican Revolution, the chief engineer of Sierra Consolidated, Robert Linton, estimated that up until that time, the total production of gold and silver from Ocampo had exceeded 100 million U.S. dollars.

In the 1930's with the rise in the official price of gold, activity in the area increased. In the period between 1939 and 1941, the predecessor company of Minerales de Soyopa produced over 3.8 tonnes of gold and 59 tonnes of silver from one high grade ore shoot at the Plaza de Gallos mine.

Small scale operators and gambosinos continued to operate in the area from the 1940's through the 1990's.

In the 1980's the Consejo de Resources Minerales (CRM), an agency of the Mexican federal Government, financed the construction of a mill equipped with a flotation circuit that can process about 100 tonnes per day.

In 1994, the Mexican mining laws were changed to allow 100 percent foreign ownership of mining properties. This change in the Mexican mining laws accelerated exploration investment through out Mexico.

In 1997, Mogul Mining NL (Mogul) entered into a joint venture with Soyopa. Mogul conducted a district scale mapping and sampling program focusing on the western portion of the district. A total of 59 reverse circulation drill holes for a total of 6,288 m of drilling was completed.

In 1999, Augusta Resources Corporation (Augusta) entered into an agreement to acquire Mogul's interest in the project. Augusta drilled 11 reverse circulation holes and deepened one existing hole for a total of approximately 1,677 m drilled. Mogul and Augusta did not meet the work commitments in the agreement and the property reverted to Soyopa.

In 1999, GLR entered the picture with an option to purchase 17 mining concessions in the area from Minera Fuerta Mayo, S.A de C.V. (Minera Fuerta). During 1999, GLR had an active exploration program consisting of mapping, sampling, underground test mining and core drilling. 50 shallow holes were drilled in the Northeast Ocampo project area totaling approximately 3,729 m. The results of this work were detailed in a PAH report dated December 9, 1999.

In 2000, GLR entered a joint venture agreement with Soyopa. The joint venture agreement was replaced with a purchase agreement dated November 24, 2001. With thee Soyopa agreement GLR effectively consolidated the entire Ocampo mining camp for the first time since the Mexican Revolution of 1912.

In 2000, GLR continued exploring the properties with delineation drilling on the shallow PGR deposits. At this time drilling to explore the deeper potential of the Northeast Ocampo vein structures was also carried out. A total of 31,046 m of reverse circulation and core drilling was completed during the coarse of this program.

As part of this program Millennium Mining Associates completed a detailed structural/geochemical analysis of the mineralization in the district. Dr. Derrick McBride performed additional structural work at this time.

Metallurgical testing was carried out by KCA in 1998, 1999, 2000, 2001, 2002, 2003, 2004 and 2005. A preliminary design and a cost estimate for a heap leach pad and ponds were made by KCA in March 2001. At the same time Seegmiller International completed a geotechnical evaluation on the stability of potential open pits for the Picacho, Plaza de Gallos and Refugio deposits.

During 2001, GLR completed a resource study that was audited by WGM.

In April of 2002 PAH completed a scoping study eximaining the economics of a combined open pit/underground mining operation utilizing heap leach recovery techniques.

In March 2002, Bolnisi entered an agreement with GLR to earn a 60% interest in the PGR portion of the property. They were to complete a feasibility study and bring the property to production within a two-year period.

Beginning in 2002 a large scale drilling program was undertaken to test the potential at depth of the high grade veins in the Northeast Ocampo project area. In the spring of 2003 the company made a decision to proceed with an underground exploration and development program via a 4x5 meter decline ramp to further explore the veins with in the Northeast Ocampo project area. KCA completed a scoping study at this time examining economics of an underground mining operation with convention mill processing.

In November 2003 the Bolnisi earn in agreement was terminated and all technical data generated by Bolnisi was made available to GLR.

In November 2004 a feasibility study was completed on a combined open pit and underground mining operation utilizing heap leach recovery techniques for the PGR open pit ores and conventional milling of the higher grade Northeast Ocampo project vein deposits. The results of this study were positive with the project showing robust economics. The Figure 6.1 shows the special relationship of the two project areas on a district scale.

Following the completion of the feasibility a construction decision was made by GLR. In January of 2005 KCA was awarded the ECPM contract. Initial ground breaking took place in March of 2005. Leach Pad loading of the leach pad commenced in December of 2005. Commissioning of the milling and CCD circuit is scheduled to be completed by the end of the first quarter of 2006.

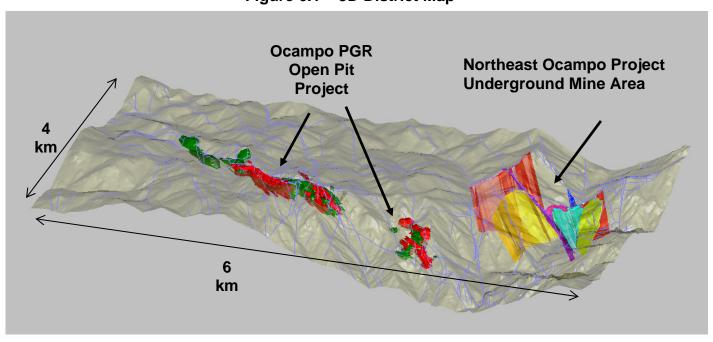


Figure 6.1 – 3D District Map

## 7.0 Geologic Setting

The geologic setting, deposit types and mineralization of the Ocampo mining district have been the subject of numerous previous reports. The following sections are taken from the 2002 PAH report, the 2004 report by Clark, GLR's AIF and the 2004 KCA feasibility study.

## 7.1 Regional Geology

The Sierra Madre Occidental (SMO) is an extensive physiographic province that is composed largely of volcanic rocks that have been intruded by plutonic rocks, which overly a Precambrian through Jurassic basement. This is one of the largest unmetamorphosed andesite and dacite accumulations in the world. Erosion and uplift has created deep incised canyons and has exposed hydrothermal mineralization in the third dimension. The basement rocks are rarely exposed and poorly known. This province extends from the center of Mexico to the boarder of the United States.

The oldest rocks exposed in the Ocampo area are Triassic to Cretaceous aged Témoris Unit. These sediments found in isolated erosional widows and are composed of conglomerates, sandstones, limestone lenses and intercalated andesites (Figure 7.1 Regional Geologic Map).

Beginning with the Laramide Orogeny in latest Cretaceous and continuing throughout Cenozoic, the area was the site of intense volcanic activity. This volcanism produced a thick sequence of volcanic flows, tuffs, and agglomerates of andesitic to rhyolitic composition and related intrusives.

Volcanic stratigraphy in the Sierra Madre Occidental has been broken into two main groups consisting of the Lower Volcanic Group (LVG) and the Upper Volcanic Group (UVG).

LVG rocks dominate the project area and consist of massive andesitic flows and tuffs. Localized beds of volcanoclastic sediments are also present. Toward the top of this group, the volcanics become more felsic. This group of rocks is host to the majority of the Au-Ag deposits exploited thus far in the SMO.

UVG rocks are comprised of felsic ignimbrites, tuffs, flows and volcanoclastics. Textural and sorting characteristics indicate some of the units were deposed under basal surge conditions. This intense and prolonged volcanic activity probably produced the hydrothermal mineralization responsible for the numerous gold and silver mines in the area.

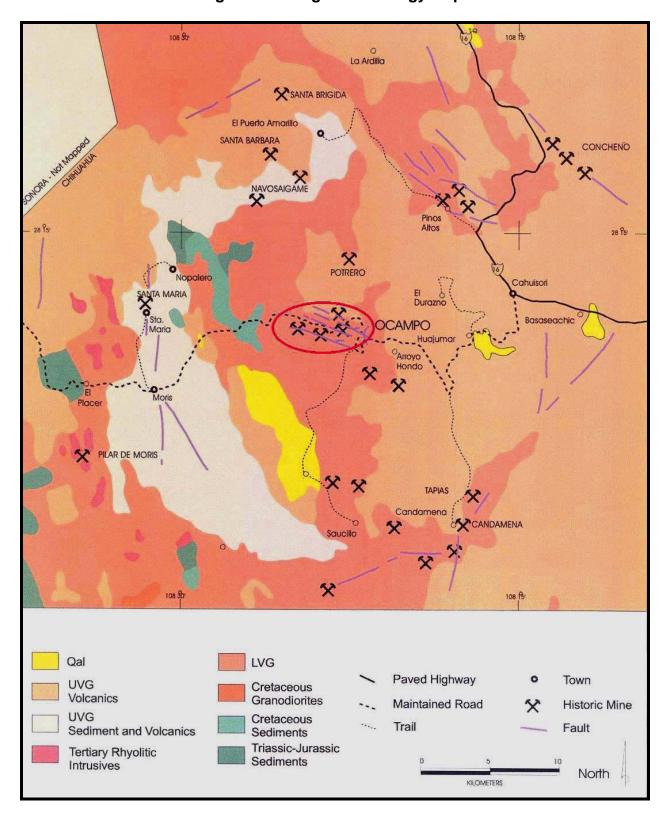


Figure 7.1 - Regional Geology Map

On a regional scale the SMO is a relatively undeformed high plateau (Henry and Aranda-Gomez, 1992). Overall, there is a northwest trending structural fabric best evidenced by the alignment of the numerous mining districts found in the SMO.

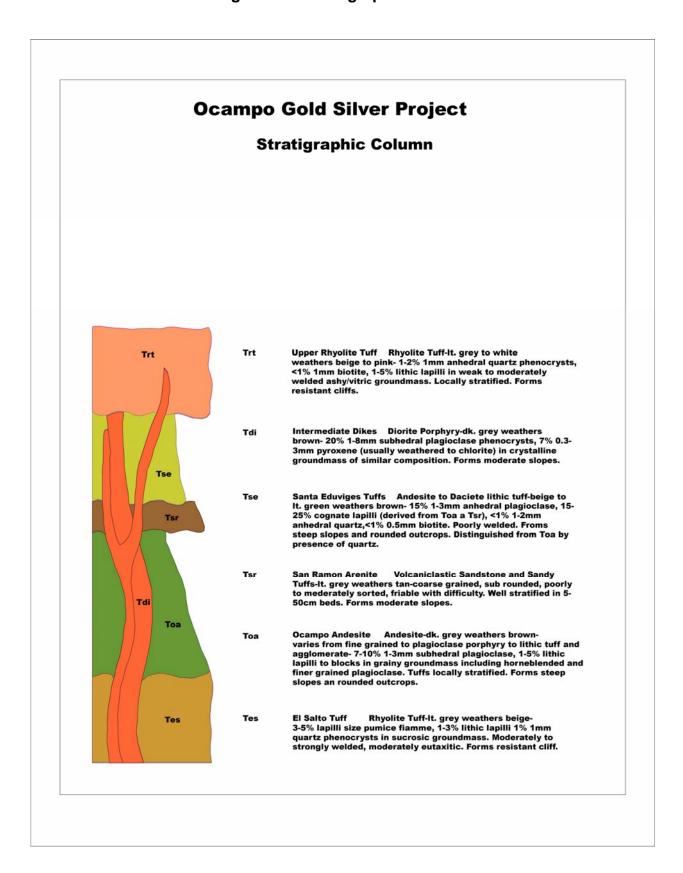
Henry and Aranda-Gomez suggest that the reason that the SMO is relatively undeformed is due to the presence of a large batholith that underlies it. This inferred batholith is believed to be source of the very large volume of volcanic sediments.

## 7.2 Ocampo District Geology

The two geologic units that are exposed within the Ocampo are the LVG and the UVG. These rocks are composed of andesites, rhyolite tuffs, andesite porphyries, flows and agglomerates which have been overlain by porphyritic andesites interbedded with agglomerates and capped by Oligocene tuffs. This system is part of a larger caldera that is about 60 kilometers in diameter. An age date of 28 Ma is recorded for the upper most volcanic unit making the major part of the mineralization older than that date.6.2.1

The stratigraphic column at Ocampo is composed entirely of volcanic and intrusive rocks of the LVG and UVG (Figure 7.2 Stratigraphic Column). The oldest recognized unit exposed at surface is a rhyolitic sequence within the LVG. Flow and pyroclactic textures have been recognized in both outcrop and core.

Figure 7.2 - Stratigraphic Column



Pyroclastic breccias from this unit contain andesite to dacite fragments indicating an older andesite unit is potentially present beneath this unit.

Overlying the rhyolite unit is a thick sequence of andesite to dacite agglomerate flows and tuffs. These rocks are also units within the LVG. Agglomerates are the dominant rock type with in this unit. Interbedded within these are occasional lenses of volcaniclastic sediments. Thin section work by petrographers in both the United States and Australia independently arrived at the conclusion that the primary host rock, the Ocampo andisite (TOA) was deposited underwater. As such the resulting host rock was rapidly chilled producing a more brittle than normal host rock.

Overlying the andesitic unit, UVG rocks are comprised of felsic ignimbrites, tuffs, flows and volcanoclastics. Textural and sorting characteristics indicate some of the units were deposited under basal surge conditions.

All the above rock types have been intruded by andesite to dacite dikes and sills. These rocks are believed to be Tertiary in age.

In general, Ocampo can be broken into two major structural areas, the NE area and the PGR trend that extends from Alta Gracia in the southeast to beyond La Estrella in the west (Figure 7.3 District Geology). This structural fabric is the result of movement along a series of northwest trending structures (MMA, 2000). MMA's work documents six major periods of deformation that were produced by a combination of the emplacement of a postulated intrusive beneath the district and extensional regional tectonics.

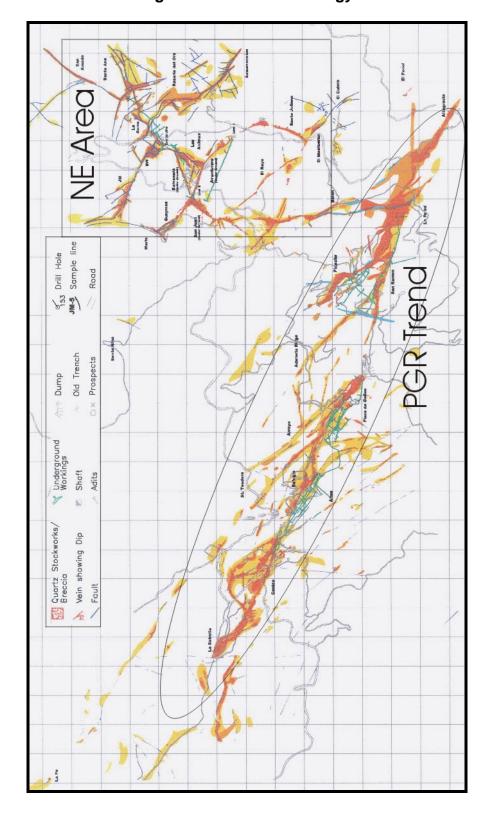


Figure 7.3 - District Geology

The following table, from the MMA report, details the six deformation events.

**Table 7.1 – Summary of Deformation, Kinematics and Mineralization** 

| Gammon Lake Resources<br>Ocampo Gold-Silver Project<br>Summary of Deformation, Kinematics and Mineralization |   |                                 |   |  |  |  |
|--|---|---------------------------------|---|--|--|--|
| Deformation Event  | Main Shear<br>Kinematics                                      | Orientation of Principal Stress | Associated Geochemical Event  |  |  |  |
| D1   | Dextral strike-slip<br>with some normal<br>movement           | S37W23                          | No known mineralization   |  |  |  |
| D2   | Sinistral strike-slip<br>with some reverse<br>movement        | N73E35                          | No known mineralization   |  |  |  |
| D3   | Dominantly dextral strike- slip with local sinistral movement | N24E03                          | Early, most intense quartz deposition                                 |  |  |  |
| D4   | Local sinistral/<br>reverse movement                          | N51W55                          | Continued quartz deposition   |  |  |  |
| D5   | Normal with minor sinistral strike-slip                       | S38E80                          | Early and strong ore-<br>metal deposition<br>(extensional kinematics) |  |  |  |
| D6   | Dextral strike-slip with minor normal movement                | N53W15                          | Continued ore-metal deposition (lateral kinematics)                   |  |  |  |

Steronet analysis shows that both dip slip and strike slip movement accompanied each phase of structural deformation. Orientation and geometry of the higher grade mineralized zones intersected in drilling, further supports both strike slip and dip slip movement.

The PGR area consists of a series of NW trending faults that jog across WNW trending structures. Timing, geometric and kinematics support the hypothesis that the WNW fault zone is an oblique transfer zone that developed in order to accommodate movement along the NW faults. Another conclusion by MMA indicates that the NW trending structures are part of a district scale cymoid loop.

The NE area consists of a large northerly trending structure, the Belen-San Jose, which is intersected by the NW trending Aventurero and Rosario structures. Numerous NNE fault segments bounded by bounded by NW faults are also present. The large north trending Belen-San Jose structure intersects the PGR trend in the La Pared area.

## 8.0 Deposit Types

Ocampo is a classic gold-silver epithermal mining district. The mineralogy and alteration present in both the PGR and the Northeast Ocampo project area are indicative of low sulphidation, quartz-adularia type epithermal systems.

The low sulphidation systems contain quartz veins, stockworks and quartz breccias with gold, silver, electrum, argentite and pyrite with minor and variable amounts of base metal sulphides. These minerals probably were deposited in a high level (epizonal) to near surface environment.

In the northwest portion of the GLR property, historic mines such as La Fe and other prospects are considered to be of the high sulphidation, quartz enargite type deposits. This type of system has veins, vuggy breccias, and sulphide replacements ranging from pods to massive lenses associated with high level hydrothermal systems. The mineralization in the La Fe area is hosted by rhyolite and dacite rocks. These rocks and mineralization may be stratigraphically lower than the mineralization in the PGR Trend and the Northeast area. This suggests that this type of mineralization may be found at depth under the PGR Trend and the Northeast deposits.

#### 9.0 Mineralization

The gold-silver mineralization in the project area is structurally controlled. Structures that strike N, WNW, NW, NE and E-W all host mineralization that is potentially of economic grade. While the majority of potentially economic mineralization discovered to date is hosted andesite flows and agglomerates, all rock types contain mineralization and no single rock type has been shown to be more receptive to gold and silver mineralization.

Quartz occurs in a number of forms such as banded creamy white chalcedony, clear crystalline white quartz and drusy amethyst. Work by MMA indicates that the majority of quartz deposition took place during structural event 3 while the gold-silver deposition only took place in the last two periods of deformation. Thin section work by Sid Williams has documented up to 50 or more individual mineralizing events in some samples.

The gold-silver mineralization is seldom found in discreet fissure veins at Ocampo. The majority of host structures consist of a core of quartz breccia surrounded by varying degrees of quartz stockworks and silicification. The true thickness of the mineralization exceeds 50 m in some areas such as Plaza de Gallos, San Ramon and Refugio. An argillized halo is often present surrounding the silicified structures.

A second type of gold and silver bearing vein has recently been discovered in the Northeast Ocampo project area. Examples of this type of vein include Esperanza, Chica Rica and deeper portions of the Maria vein. Mineralization in these veins consists of semi to massive sulfides filing fractures and as disseminations in the wall rock sulfide.

Relatively minor quartz accompanies the sulfide mineralization compared to the dominate quartz breccia vein type.

The precious metal assemblage consists fine grained electrum, acanthite and native silver. Occasionally ruby silver and cerargyrite have been noted in hand samples and core. The base metals include sphalerite, galena and chalcopyrite occur in minor varying amounts but have no economic importance. These veins do not appear to increase in concentration at depth.

A study by MMA suggests that Cu, Pb and Zn along with gold and silver can be indicators for precious metal deposition. The same study found that depletions of Li, Ba, Na, K and Ti can also be an indication of precious metal deposition.

Argillic or clay caps may be an expression of the very tops of the precious metal depositional horizons.

The gold-silver mineralization is known to occur in this area over a vertical distance of at least 750 m. This vertical distance is not known from just one deposit. It is based on the fact that the lowest productive levels at the Santa Juliana mine were at an elevation of approximately 1,400 m and the vein outcrop at the Plaza de Gallos, the highest point, is at an elevation of approximately 2,150 m.

## 10.0 Exploration

GLR's exploration activities have been detailed in numerous reports by reputable mining consulting firms and Qualified Persons as defined by NR43-101. The following has been taken from the NR43-101 dated March 31, 2004 by Glenn Clark and the Feasibilty Study dated November 2004 by Kappas Cassiday & Associates and up dated to reflect subsequent exploration activities.

GLR has been actively exploring the Ocampo area properties since 1999. Exploration activities have consisted geological mapping, sampling both on surface and underground, diamond drilling and RC drilling from surface, diamond drilling from underground and test mining

A number of studies have been done off site. These include mineralogy, metallurgy, slope-stability, and preliminary economic evaluations.

In 1999, the initial exploration was in the Northeast area. Geological mapping, sampling, and test mining was carried out at the old Brenda mine. In addition, 50 diamond drill holes were completed in the Northeast area.

In 2000, detailed surface geological mapping, trenching and road building were carried out. An extensive drilling program was undertaken with a total of 180 RC and core holes completed.

GLR expanded their holdings in 2000.

During 2000 and 2001, a program of underground mapping and sampling in accessible workings was carried out. An exploration drift was driven at this time into the Northeast area to provide greater drilling access.

In 2002 a portion of the property referred to as the PGR trend (Plaza de Gallos-Refugio) was placed under a Joint venture agreement and the partner, Bolnisi, was named the operator. Bolnisi carried out further drilling, metallurgical testing and process design work and completed a feasibility study on open pit mining in the PGR area.

GLR continued to explore the Northeast area with diamond drilling in 2002, 2003 and 2004. In 2003, a ramp to access Northeast Ocampo veins was started. This program of underground development and drilling continued during 2004 and 2005. Current underground mine development consists of approximately 10,000 meters of sills, haulage drives and raises. Four (4) shrinkage stopes are currently being developed with raises being driven on two (2) more. GLR plans to have three (3) shrinkage stopes ready for "free pulling" of ore before the mill commences operations.

## 11.0 Drilling

Since 1997, the Ocampo project area has been the subject of a number of drilling campaigns by GLR and other operators. GLR has maintained the results of all the drilling completed since 1997. The following table shows the number of holes that have been drilled for each of the companies as of September 2005.

**Table 11.1. Drilling by Company** 

| Company                 | No.   | Meters  |
|-------------------------|-------|---------|
| GLR                     | 872   | 172,905 |
| Mogul                   | 59    | 6,451   |
| Augusta                 | 11    | 1,561   |
| Bolnisi                 | 96    | 16,120  |
| Total to September 2005 | 1,038 | 197,037 |

Project wide 52% of drilling has been completed with core, 48% using reverse circulation (RC) sample collection. Reliable operators have been used with no water inflow or other sampling problems being reported.

In the Northeast area the drilling has been predominantly by diamond core drilling. The first 20 holes of the 2002 drilling program were collared using RC methods and completed through the mineralized zone with core. All holes drilled since 2002 in the Northeast Ocampo project area have been diamond core holes.

Underground drilling in 2000 and 2001 was done from drill stations prepared in old workings. Drilling from 2003 onward has been from drill stations constructed as part of the development of the underground mine.

At present, there are 2 surface drills and 1 underground drills working on the property.

## 12.0 Sampling Method and Approach

Sampling procedures have been consistent through out the various programs conducted in Ocampo. Parts of the following have been excerpted from the previously sited reports.

## 12.1 Surface Samples

The exploration surface samples were mostly in the form of channel chip samples that were collected by GLR employees or its predecessors. The samples were generally 3 m in length. The sample lines were surveyed by tape and compass methods and tied to the local grid using appropriate points of control.

Grade control sampling in the open pit area is based on trenches dug by a backhoe or excavated by hand. Sample length is 1 meter. GLR has purchased a Vermeer trencher that will be employed to cut trenches as soon as sufficient working areas have been developed. The Vermeer is capable of excavating a 15 to 20 cm deep trench.

## 12.2 Underground Samples

During the 1999, 2000 and 2001 exploration programs underground samples in old workings were collected using chip samples across channels. When necessary due to groundwater scaling, the face was cleaned prior to taking the sample. When the drift was in the vein, back samples were taken, usually with a single sample across the back. When the exposure was in a cross cut, a wall was sampled.

Underground sampling in the Northeast Ocampo underground mine has been conducted according to a sampling protocol developed by PAH in a report dated January 30, 2004. Channel samples are taken across the mineralized structures at 1.5 to 3 meter spacing along exploration drifts and sills and in the stopes. Multiple samples, respecting geologic boundaries, are taken across the face, back or rib of the workings. In addition, GLR takes a production channel sample across the entire mined width.

Underground samples are treated as if they were drill holes and stored in the project database. To accomplish this task, each channel is stored with a channel identifier (ID), along with the location northing, easting and elevation mine coordinates.

## 12.3 Surface Ore Stockpile Samples

Currently, GLR is placing mineral and waste material from the exploration/development ramp by the portal where it is loaded to 30 or 13-tonne mine trucks and hauled to the waste dump or ore stockpile areas. Separate ore stockpiles are kept for each vein. Samples from the "ore" stockpiles are taken after unloading and then the piles are flattened to create a "bench". "GLR is going through great effort to map the location of piles relative to the mine location(s) where the pile came from." (PAH, 2004)

## 12.4 RC Samples

Sampling procedures for the RC drilling have been constant through out the various drilling programs. The samples were continuously collected in a cyclone. At the end of each sample run (5 feet or 1.5 m depending on the origin of the pipe) the sample was discharged through a Gilson Riffle. One half of the first split was split again to form a sample for assaying and a duplicate sample. In zones of poor recovery only one split was made. If the sample was wet due to injection or water inflow a rotary wet splitter was used to collect the sample in buckets before being double split through a riffle splitter. The drilling crew collected the samples. The quality of the samples was under GLR supervision. The recovery was logged using a qualitative scale of 1-3 and a notation generally made in the comments column in zones of poor recovery. An additional small sample was collected and placed in trays designed to hold RC chip samples. The chips were geologically logged on site.

## 12.5 Core Samples

The core was either HQ or NQ in size in the surface holes. Holes were started at the larger HQ size and reduced to NQ if necessary. Underground holes were similarly started with HQ size and reduced to NQ after 20 or 30 m during the 2001 and 2002 drill program. The longer holes drilled by a small "gofer" rig in the 2000 and 2001 program utilized the smaller BQ size to facilitate the drilling. All of the recent underground holes drilled in 2003, 2004 and 2005 were drilled using HQ or NQ sized core.

The drilling crew boxed the core and GLR employees transported it to the core shack.

In the core shack, the core was geologically logged with sample lengths indicated. When the sample lengths were determined, the core was split using an impact splitter with one half of the core being bagged and tagged for assay. The other half was returned to the core trays for storage.

The earlier BR and UGD holes used a sample length of 1 m. The surface ODH holes were sampled on 1.5 m lengths. The current drilling is sampled at 4.5 m lengths until the stockwork beside the quartz breccia/vein is reached. At that point the sample length is reduced to 1.5 m to sample the stockwork. When the quartz breccia/vein is reached the sample length is reduced to 1 m in length and it usually stays that length until the end of the hole. The length of the samples may vary due to the thickness of the vein.

## 13.0 Sample Preparation, Analyses and Security

## 13.1.1 Exploration drilling and sampling

The handling procedure has always been the same through out the project history. The bagged and tagged samples were turned over to Chemex personnel at the site and Chemex took them directly to their sample preparation facility. The sample rejects are stored in Chemex's facility in Hermosillo. Chemex crushed the samples and prepared 200-300 g pulp samples. Ninety percent of the pulp will pass Tyler 150 mesh (106µm). The pulps were sent to Chemex in Vancouver for analysis.

## 13.1.2 Grade control and underground development samples

Prior to late 2003 all samples were submitted to Chemex for analysis. In 2003 BSI Inspectorate (BSI) was contracted to refurbish and commission an on sight laboratory at the existing CRM mill. This lab was commissioned at the end of December 2003. BSI operated this laboratory as an independent contractor and was contractually obligated to perform the same QA/QC procedures as at its commercial facilities. In addition for the first several month of operation a detailed check assay program was completed using Chemex. This work confirmed the lab was operating to industry standards. GLR took over the laboratory in June of 2005. The check assays are continuing to be sent to Chemex.

The sample preparation is similar to that described above. No exploration or drilling samples are sent to the GLR laboratory.

A larger laboratory capable of +800 grade control samples with additional AA capacity for production solution analysis is current under construction.

## 13.2 Analyses

All of the BR holes drilled by GLR in 1999 and year 2000 holes - ODH-60 to 80, including the Augusta holes and the first four Mogul holes - used a 30 g fire assay with AA finish for gold and Aqua-Regia extraction with an AA finish for silver. Assay values that exceeded 10 g Au/t or 100 g Ag/t were re-analyzed by fire assay with gravimetric finish.

All GLR holes, subsequent to drill hole ODH-80, were analyzed using a 1-assay ton sample for fire assay with a gravimetric finish for both gold and silver. Except for the first four, all of the Mogul holes utilized this same analytical method.

Chemex discovered a potential underestimation of silver values due to plugging of the AA pipette when using Aqua-Regia/AA methods. For this reason the mineralized zones from holes ODH-71 to 80 and a number of the 1999 BR holes were reanalyzed utilizing a 1-assay ton sized sample for fire assay with a gravimetric finish. This re-assaying by fire assay indicated that significant (order of magnitude) underestimating of silver had

occurred in less than 5 percent of the samples that had been assayed using an Aqua-Regia/AA finish.

The GLR laboratory utilizes fire assay with gravimetric finish.

## 13.3 Security

The samples for assay are taken directly from the site to the Chemex facilities by the Chemex staff. The sample rejects are stored at Chemex's Hermosillo facility.

The RC duplicate samples from the drilling prior to the 2002-2003 program are stored in a pole barn at a fenced and secured site near Picacho. This site has a 24-hour guard that lives adjacent to the site. Starting with the 2002-2003 drilling program the RC duplicate samples are stored in a locked building at the Soyopa complex below Picacho.

The drill core in the early stages of the program was kept in a locked, closed and secure building near the GLR field office at the Fomento mill just north of the Northeast drilling area. This core has been moved and the entire core is now stored in a cement block buildings at the Soyopa complex. This facility is locked and secure and a security guard lives on the site.

Pulps and sample rejects from the GLR laboratory are stored in a building adjacent to the laboratory.

## 13.4 Bulk Density

Over approximately 330 bulk density measurements have been taken, primarily from the PGR area including waxed and unwaxed measurements. The average rock density is 2.5 g/cm.

#### 14.0 Data Verification

Mintec has stored the entire database provided by GLR to be used for statistical analysis and for use in developing resource models for each designated mine and vein area drilled. This data has been displayed to observe any specific obvious errors in collar and elevation locations such as hanging in mid air, or starting well below the surface where there are no openings. Also visually checked, were orientations of all drilling to ensure the correctness of the drill hole direction and length. Where there were obvious errors, the GLR geologists were conferred with, and appropriate data adjustments were made.

The approach to modeling first in section, and then in plan, gave Mintec many opportunities to question specific areas where, with no fault structures indicated, disjoint vein continuities might suggest numerical coordinate errors might exist. This potential error was encountered very infrequently, and immediately discussed and corrected, or observed and concluded by GLR geology to be correct.

Mintec concludes that the assay database used for the PGR and the Northeast mineral resource estimation is sufficiently free of error to be adequate for resource estimation.

## 15.0 Adjacent Properties

There are no adjacent properties with moderate to large scale historic mining activities. The GLR is unaware of any systematic modern exploration program having been conducted on any adjacent property. Peñoles' Piños Altos project, an advanced stage gold silver project is located approximately 8 km north of Ocampo.

# 16.0 Mineral Processing and Metallurgical Testing

The KCA November 2004 feasibility contains detailed results of the all metallurgical testing that has been performed on the Ocampo gold silver ores. This report can be found at <a href="https://www.sedar.com">www.sedar.com</a>.

The following summaries the salient metallurgical recoveries detailed in the feasibility study and used in the calculation of reserves.

## Heap Leach

| Ore Type   | Crush<br>Size<br>P80, mm | Au Recovery<br>% | Ag Recovery<br>% |
|------------|--------------------------|------------------|------------------|
| Low Grade  | 25                       | 77               | 48               |
| High Grade | 4.75                     | 87               | 72               |

## Mill CCD

| Grind size<br>Tyler<br>Mesh/microns | Au Recovery % | Ag Recovery % |
|-------------------------------------|---------------|---------------|
| 75/-200                             | 96            | 93            |

#### 17.0 Mineral Resource and Mineral Reserve Estimates

#### 17.1 General

The mineral resource and mineral reserve estimates were calculated from 3-dimentional block models that represent the deposit utilizing commercial mine planning software developed by Mintec, Inc. called **MineSight**<sup>®</sup>. Mintec and GLR developed the original resource model of the PGR trend deposits and separately the Northeast deposit for the completion of the 2004 feasibility study with Kappes, Cassiday and Associates.

The project limits are based on a local mine grid of 16,100 to 22,800 Easting, and 8,400 to 14,900 Northing. This area represents over a 6.5 square kilometer area. The elevation bounds are 1,000 meters by 2,200 meters. The block cell size for the open pit PGR deposit model measures 10 meters east by 4 meters north by 6 meters high. The block cell size for the underground Northeast deposit model measures 2 meters east by 4 meters north by 4 meters high. The ore block sizes were chosen to minimize dilution of the dipping ore zones, and for tight geological control for the high-grade veins.

# 17.2 Geographical Area Model Division

Gold and silver mineralization is largely structurally controlled. Based on the large base of drill hole information and geological mapping, the deposit has been subdivided into a number of areas based on historical mining names, or new geographical areas or domains, each containing predominant structures of differing orientation. The naming convention for these areas has previously been summarized, but major domains for resource reporting are as shown below:

- 1. Most easterly deposit La Estrella on the PGR Trend including Conico
- 2. Refugio
- 3. Plaza de Gallos
- 4. Picacho including the San Ramon and Suerte de Lucas discoveries
- 5. Northeast Zone

There have been a total of 962 drill holes, trenches and underground channel samples comprising a total of 89,604 meters of exploration information completed within the PGR Trend area that have been loaded into the Mintec data base.

A number of these holes were drilled outside of the productive deposit areas for geotechnical purposes or for condemnation drilling and were not used to define ore zones. Mintec filtered the data to be used for grade extension by assigning an ore code for low-grade equivalent gold (0.2 to 1.0 g/t assigned an ore code of 1), high-grade equivalent gold (greater than 1.0 g/t assigned an ore code of 2), and void or barren areas (assigned an ore zone code of 3) to identify drill holes and their interval ranges which contributed to the development of ore zones. Identified continuous mineralized zones have been drilled on 50-60 meter grids, with many infill section spacing done on 25-

meter grids. There were a total of 64 sections used to describe resource areas whose combined strike length spans 2,500 meters. The 1.0 g/t high-grade resource vein sets were designed using a total of 60 interpreted sections.

The high-grade vein definition in the feasibility PGR open pit model was based on a 3.0 gpt equivalent gold cutoff to parallel the Northeast underground model. A review of the mining procedures for high and low-grade material definitions in the Ocampo heap leach facilities suggested that the cutoff be reduced to 1.0 gpt to differentiate high-grade production ore from low-grade production ore. This modeling change simplifies the mining plans for the ultimate production schedule and forecasting for metal recoveries.

# 17.3 Data Analysis

### **17.3.1 General**

The geostatistical analysis of Ocampo deposit included the statistical analysis of assays and composite grade items, the correlation analysis of the composites and the spatial continuity analysis of the mineralization using the variograms.

The entire Ocampo deposit database currently contains a total of 2,759 records of drill holes of various lengths and orientations, including the trenches and underground samples. This number also includes the holes that were drilled outside of the productive deposit areas for geo-technical purposes or for condemnation drilling. The majority of the holes are drilled at dips between 30 to 75 degrees. They are oriented towards the trend plane of the deposit that has a strike of about N120E. The holes were typically drilled on sections that are 25-50m apart depending on the location. The depths of the holes are mostly within 100-250m range.

The total drilling is over 208,500m with about 135,000 assay intervals, including those un-assayed intervals. The assayed intervals for gold and silver are about 97% of the total assays. The nominal assay interval length is 1.5m although there are some at 3m. Therefore, the average assay interval length is 1.52m.

There are areas in the deposit that are identified by a specific name. Only four areas of the PGR trend were included in the study. These are:

- 1. La Estrella/Conico
- 2. Plaza de Gallos
- 3. Refugio
- 4. Picacho

Assays in these areas were given an AREA code of 1-4. The assays that are outside these areas are not included in the study. The mineralization intensity codes were based on gold and silver grade polygons interpreted on benches. These polygons became the basis of the solids representing the three grade mineralization categories as follows:

- 1. Low grade (LG zone)
- 2. High grade (HG zone)
- 3. Internal waste

Assays within these solids were given a ZONE code of 1-3. Only about 28% of the assays in the studied areas were assigned codes. The assays outside the solids therefore were not coded, and are considered waste.

# 17.3.2 Assay Data Statistics and Log-probability Plots

Statistical analyses of assay data were performed for gold (AU) and for silver (AG). General statistics—total length, number of samples, mean value, standard deviation, maximum value, and coefficient of variation— were calculated for reference. However, these statistics were limited to those assays with assigned ZONE and AREA codes. Tables 17.1 and 17.2 give the summary statistics for the original AU and AG of assays in the database at different cutoff grades using all areas and the two main grade zones but excluding internal waste.

Detailed statistical analyses were done by ZONE and AREA to look at the histogram and the cumulative frequency curves for gold and silver. These statistics were used to define the outlier cutoff grades for the assays. Based on these statistics, it was also decided to study the AREA 1-4 assays together. Figures 17.1 and 17.2 give the log-probability plots showing the cumulative frequency curves for gold in these areas within ZONE 1 and 2, respectively. ZONE code 3, internal waste, was not studied.

### 17.3.3 Evaluation of Outlier Grades

Mintec identified outlier grades for AU and AG by using observed breaks in trends defined in the cumulative distribution for these metals (Figures 17.1 and 17.2).

For restriction of high-grade outlier values during the interpolation, the outlier cutoffs for the AU and AG grades were used. These outlier cutoffs were 20gr for AU and 1000 gr for AG. The influence of the composites higher than these values was limited to 30m.

# 17.3.4 Gold-Silver Grade Correlations

The AU and AG assay grades correlations were studied within ZONE 1 and 2. The scatter plots indicate that the correlations are reasonably well but vary for different areas. The coefficients of correlations obtained from the least square linear regressions are 0.73 and 0.85 for ZONE 1 and 2, respectively. Figures 17.3 and 17.4 show scatter plots of AU versus AG assays in these zones.

# 17.3.5 Composite Data Statistics

Both the gold and silver assays in each drill hole were composited into 3m fixed lengths for equal support. These 3-m composites were used for the variogram analysis and in the interpolation of block grades of the 3-D mine model.

Each composite interval in the database was also assigned a ZONE and an AREA code based on the majority length. Tables 17.3 and 17.4 give the summary statistics by ZONE for the 3-m AU and AG composites, respectively.

Figures 17.5 and 17.6 show the statistics and histogram plots of the AU and AG composites in ZONE 1-2. The first class interval in both AU and AG histograms indicate that there is still considerable internal waste in this high-grade zone. Therefore, one can expect some smoothing and dilution in the block grades when the grade interpolation is performed.

# 17.3.6 Variography

Variogram analyses using the 3-m composites were done for AU and AG items. ZONE 1 and 2 composites were used to determine the spatial continuity of the mineralization. Low and outlier high-grade cutoffs were applied to AU and AG to have representative data for the variogram analysis. The type of variogram used in all calculations was the correlogram. A correlogram has a normalized sill value of 1.0 as opposed to a normal variogram that generally has a sill value equal to the variance of the composite data used. The advantage of the correlogram is its ability to deal with the variability of the data better than the normal variograms. Thus it is more likely to capture the underlying spatial continuity of the mineralization.

Directional variograms were calculated for both AU and AG at 45° increments of 0, 45, 90, 135, 180, 225, 270 and 315 degrees in horizontal directions, and 0, 30, 60 and 90 degrees in vertical directions, using a ±22.5° tolerance angle horizontally, ±15° tolerance angle vertically. Since the variogram on the same plane in any given direction is the same as the variogram in opposite direction, these angles cover the entire 360° circumference of the orebody.

The directional variograms essentially exhibit the continuity of the mineralization at different directions in a mathematical form. A visual display of this continuity was accomplished by generating variogram contours from these directional variograms. The contours represent iso-variogram values on a particular plane. The outermost contour line is usually the 1.0 contour where the variogram reaches the normalized variance line or the expected sill. Theoretically, it means that samples are not correlated once the distance between them exceeds the distance to this contour line in a given direction.

If the mineralization is isotropic, the variogram contours will be more or less circular. If there is anisotropy or the mineralization is more continuous in one direction than another, the variogram contours will be more elliptical. The azimuth of the major axis of

the ellipsoid provides us the trend direction. The ratio of the major to minor axis provides the anisotropy ratio.

Figures 17.7 and 17.8 show the variogram contours on the horizontal plane generated based on the directional variograms in ZONE 1-2 for AU and AG, respectively. The modeling of the variograms was based on the all directional variograms. Spherical nested models were used to characterize these variograms, using an automatic curve fitting algorithm that minimizes the error between the model and the experimental variograms.

Based on these variograms, the primary mineralization structure ranges in the strike direction are 12 and 9 m for AU and AG, respectively. The secondary structure continuity in the strike direction is over 120 m for both AU and AG. However, the correlations between the samples are less in this range.

In the dip direction, the primary and secondary mineralization structure ranges for AU and AG are over 200 m, showing high continuity. However the sample spacing in this direction, the primary structure continuity in the dip direction is not well defined.

The variograms vertical to the strike/dip plane display a shorter range as expected. The primary structure ranges for AU and AG are 4-9 m. The secondary structure ranges are 19-27 m. These secondary ranges have lower correlations between samples.

Figures 17.9 and 17.10 show the plots of the directional variograms and the spherical model fit for AU and AG, respectively. Table 17.5 summarizes the variogram model parameters for both AU and AG.

The nuggets of the variograms were determined mainly from the down-hole variograms. The indicated nuggets for AU and AG varied between 50 to 60% sill value of the variograms. These values are high but not unexpected for this type of deposit. However, there is always the possibility that the nugget values will get magnified because of the errors in sampling and assaying. Therefore, the in-situ variability at zero distance is sometimes better than what the variogram nugget indicates. Furthermore, the variograms were computed using combined ZONE 1 and 2 codes. In interpolation of blocks, a geologic matching procedure will be used to ensure the exact matching of the same composite codes with the blocks. This will reduce the variability of the samples used in the block interpolation.

# 17.3.7 Cross Validation

The variogram parameters were tested and refined using cross validation methodology on the composite data. With cross validation, one estimates a known data point using a candidate variogram model and point kriging (or any other interpolation method), pretending that this data point is not known. In other words, only the surrounding data points are used to interpolate this data point, while leaving the data point out.

Once the estimated grade is calculated, one can determine the error between the estimated value and the true known value for this data point. The procedure is repeated for all known data points in the project area, to compute the error statistics such as the mean error, variance of errors and the average kriging variance for specified model parameters. For comparison, the overall process is repeated using different variogram or search parameters or models to check the goodness of these parameters.

A cross validation analysis was performed for both AU and AG to validate the interpolation parameters for ZONE 1 and 2. A few parameters were modified and the cross validation was repeated to see the sensitivity of the parameter changes on the results.

## 17.3.8 Interpolation Parameters

The variogram analysis and the study of drill hole grade distribution indicate that there is a trend plane with an approximate strike angle of N130E. This plane dips at different degrees from 30-60° southwest depending on the area and zone. Although 60° is more prevalent dip angle, the corresponding strike and dip angles can be adjusted when interpolating the grades by zone or area.

The search ellipsoid parameters to be used in the 3-D model grade interpolation were determined after the mineralization plane and the variogram parameters were identified. For this, search ellipses were fit using the secondary ranges of the variograms on the selected trend planes for AU and AG. The areas that should be within an open pit were kept at the minimum due to the close spaced drilling. The areas significantly below the open pit area were allowed to select data from composites at considerably up dip distances to complete the grade extension. All these tonnes greater than 75 meters from any composite are termed inferred, and are thus left out of the resource summary of the PGR for the open pit area.

Table 17.1 - Statistics of Au assays at different cutoffs

| Cutoff | Number | Length<br>(m) | % Above | Mean  | Std. Dev. | C.V.  |
|--------|--------|---------------|---------|-------|-----------|-------|
| 0.0    | 16,906 | 24,703.9      | 100.0   | 0.527 | 2.098     | 3.985 |
| 0.2    | 6,402  | 9,412.6       | 37.9    | 1.290 | 3.258     | 2.526 |
| 0.4    | 3,860  | 5,655.7       | 22.8    | 1.964 | 4.064     | 2.069 |
| 0.6    | 2,775  | 4,062.3       | 16.4    | 2.545 | 4.669     | 1.834 |
| 0.8    | 2,177  | 3,181.8       | 12.9    | 3.058 | 5.159     | 1.687 |
| 1.0    | 1,788  | 2,603.5       | 10.6    | 3.539 | 5.590     | 1.580 |
| 2.0    | 915    | 1,326.1       | 5.4     | 5.601 | 7.254     | 1.295 |
| 3.0    | 571    | 823.2         | 3.4     | 7.533 | 8.653     | 1.149 |

Table 17.2 - Statistics of Ag assays at different cutoffs

| Cutoff | Number | Length<br>(m) | % Above | Mean   | Std. Dev. | C.V. |
|--------|--------|---------------|---------|--------|-----------|------|
| 0      | 16,904 | 24,700.8      | 100.0   | 22.01  | 92.04     | 4.18 |
| 1      | 16,443 | 23,994.1      | 97.3    | 22.64  | 93.31     | 4.12 |
| 5      | 7,515  | 10,997.5      | 44.5    | 47.40  | 133.66    | 2.82 |
| 10     | 5,222  | 7,687.4       | 30.9    | 64.93  | 156.64    | 2.41 |
| 20     | 3,275  | 4,818.1       | 19.4    | 95.54  | 191.39    | 2.00 |
| 30     | 2,438  | 3,590.6       | 14.4    | 120.00 | 216.34    | 1.80 |
| 50     | 1,622  | 2,376.0       | 9.6     | 161.62 | 256.10    | 1.58 |
| 100    | 850    | 1,232.8       | 5.0     | 246.02 | 333.80    | 1.36 |

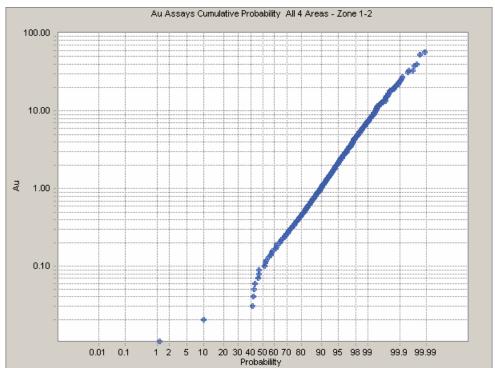
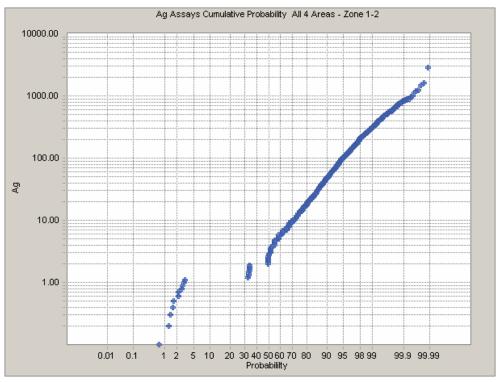


Figure 17.1 - Probability plot of Au assays – Zone 1-2





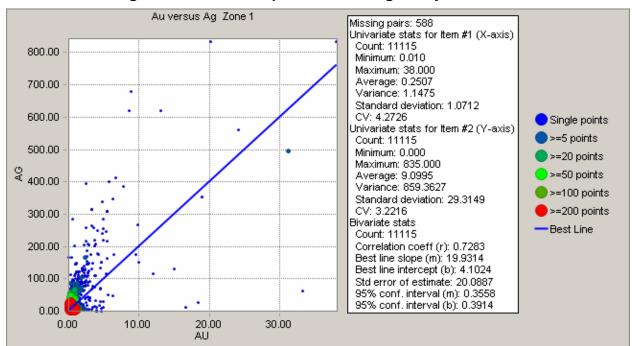


Figure 17.3 - Scatter plot of Au vs Ag assays - Zone 1



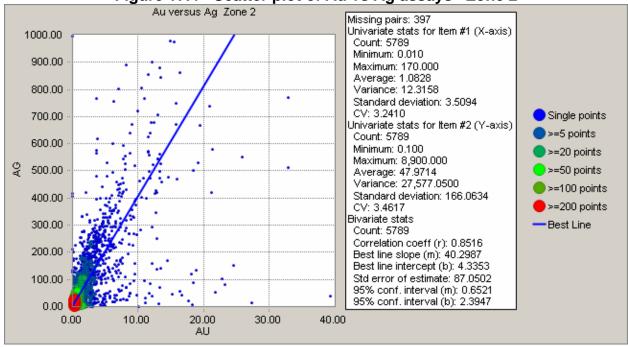


Table 17.3 - Statistics of 3-m Au composites by Zone

| ZONE  | Length<br>(m) | % Within | Mean  | Std. Dev. | C.V. | Max   |
|-------|---------------|----------|-------|-----------|------|-------|
| 1     | 18,050.7      | 75.0     | 0.236 | 0.17      | 1.09 | 2.36  |
| 2     | 5,026.3       | 20.9     | 2.006 | 3.31      | 1.65 | 58.96 |
| 3     | 991.4         | 4.1      | 0.046 | 0.03      | 0.72 | 0.25  |
| TOTAL | 24,068.4      | 100.0    | 0.512 | 1.65      | 3.23 | 58.96 |

Table 17.4 - Statistics of 3-m Ag composites by Zone

| ZONE  | Length<br>(m) | % Within | Mean  | Std. Dev. | C.V. | Max     |
|-------|---------------|----------|-------|-----------|------|---------|
| 1     | 18,050.7      | 75.0     | 6.03  | 7.28      | 1.21 | 88.00   |
| 2     | 5,026.3       | 20.9     | 86.05 | 142.25    | 1.65 | 3,226.7 |
| 3     | 991.4         | 4.1      | 1.84  | 1.26      | 0.69 | 8.90    |
| TOTAL | 24,068.4      | 100.0    | 21.38 | 71.07     | 3.32 | 3,226.7 |

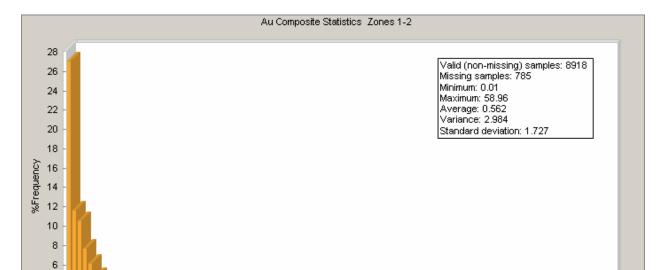


Figure 17.5 - Statistics and histogram of Au composites— Zone 1-2

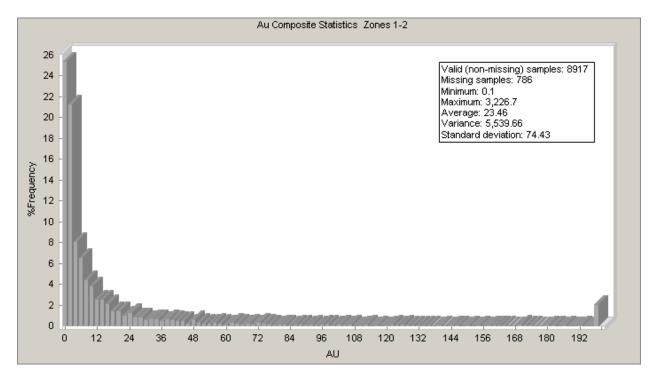


2.40

ΑU

2.70 3.00 3.30 3.60 3.90 4.20 4.50

4.80



2

0.00

0.30

0.60

0.90

1.20

1.50

1.80

2.10

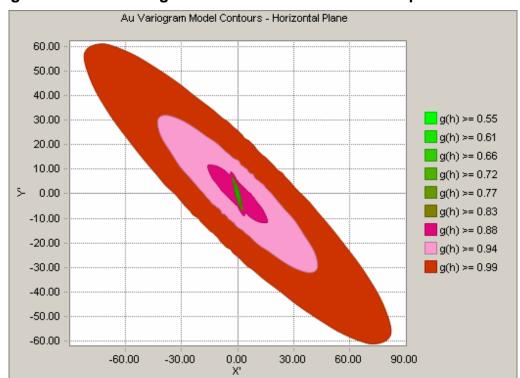
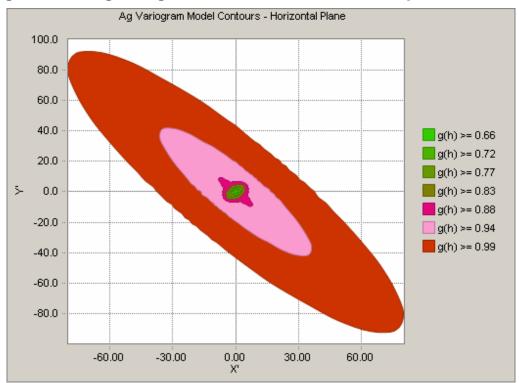


Figure 17.7 - Au variogram contours on the horizontal plane – Zone 1-2





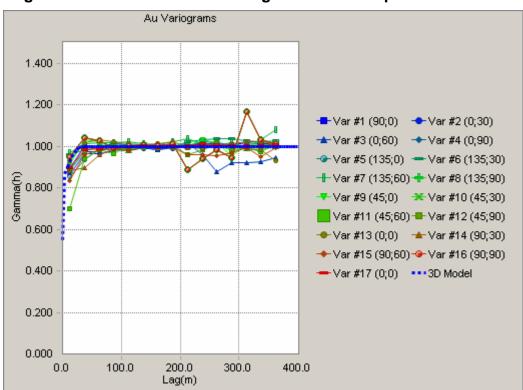


Figure 17.9 – Au directional variograms and the spherical model fit



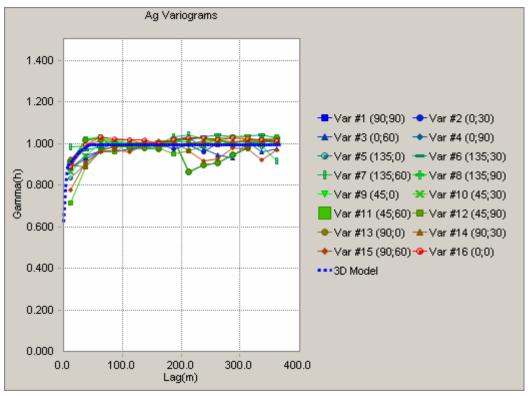


Table 17.5 - Spherical variogram model parameters for Au and Ag

| Variable | Nugget | Sill | Sill |              | Strike<br>30E | Down<br>~60° | n Dip<br>'SW |              | I to the<br>e/dip |
|----------|--------|------|------|--------------|---------------|--------------|--------------|--------------|-------------------|
| Variable | Nugget | (1)  |      | Range<br>(1) | Range<br>(2)  | Range<br>(1) | Range<br>(2) | Range<br>(1) | Range<br>(2)      |
| AU       | 0.55   | 0.30 | 0.15 | 12           | 121           | 199          | 284          | 4            | 19                |
| AG       | 0.62   | 0.25 | 0.13 | 9            | 137           | 176          | 298          | 9            | 27                |

# 17.4 Model Development for NE Area and PGR Trend

Two separate block models were developed to allow for interpolation purposes. They are entitled the PGR and Northeast models respectively. In both models, the Methodology was to use a 3.0 g/t equivalent gold boundary to prepare volume shapes to enclose the drilled vein structures. Such shapes were prepared to bound the high-grade mineralization. These structures contain the majority of the gold and silver to be mined.

#### 17.4.1 Northeast Area

The Northeast Ocampo underground area comprises an aerial extent of 1.7 kilometers by 2.8 kilometers. A total of 342 drill holes and channel samples were used to define the San Juan, Aventurero, Rosario, Las Animas-San Amado and Esperanza veins which were modeled in the Mintec study of 2004. There were no changes in the descriptions of these veins, except for the Esperanza. Because of the new exploration drilling that comprised of 44 additional holes and channel sample composites, a new resource study was done based on the updated vein definition for Esperanza. Also, Chica Rica, Maria, Brenda and JM Tierra veins are included in the new study using 285 drill hole and underground sampling composites, in order to incorporate them into short range mine plan.

There were a total of 351 assays ranging from 0.2 meters to 6 meters in length to model Esperanza and the additional underground veins. Based on statistical analyses, assays were cut to 75 g/t gold and 2500 g/t silver in the Chica Rica, Esperanza and Maria veins, 25 g/t gold and 1800 g/t silver in the Brenda and JM Tierra veins.

An economic cutoff of 3 g/t gold equivalent was employed with allowances for internal waste resulting in 351 composite assay intervals calculated from the cut assay data. These composited intervals averaged 6.07 g/t gold and 246 g/t silver, or 9.85 g/t equivalent gold, and comprised a total length of 867.8 meters. These intervals were then used to define vein geometry.

The methodology employed to determine the resource volumes utilized geologic interpretation combined with a process developed by Mintec to establish basic vein surfaces using the composites. The resulting hanging wall and footwall surfaces were then horizontally sliced in four-meter elevations. These four-meter vein boundaries were then used to define vein geometry and block model.

The grade calculations employed Inverse Distance Weighted of power 3 methodology. Measured category is defined as up to 25 meters from the closest composite and indicated 75 meters from the closest composite. Up to five composites were used for the block grade extensions. The vein boundaries are intersected with the block model and the percentage of the block that is above the 3 g/t cutoff is determined.

### 17.4.2 The PGR Trend

In the PGR trend there are a total of 4,333 meters of assay that are greater than 1.0 g/t gold equivalent. The average gold grade is 2.44 g/t and the average silver is 102 g/t. This converts to 4.1 g/t gold equivalent at the gold to silver ration of 60 parts silver equal one part gold. When composited, the number of high-grade composites found greater than 1.0 g/t gold equivalent within the PGR is 4,318 meters grading 3.9 g/t gold equivalent.

Within the PGR trend, the sections for each area have been prepared as separate units within the area. These veins on section have been linked with their east and west neighbor or maximally extruded to an average of 40-meters when they are on the outside of a specific vein, and then are closed off. These volume shapes are basically the same foot and hanging wall boundaries that were used to bound the veins in the Northeast area, except that what may be the same vein across the Conico-Refugio-Plaza de Gallos trend, is artificially broken up at the edges of each geographical area for tighter control of volume shapes.

The lower grade outlines for all areas were prepared first from section, and then sliced in plan at 6-meter intervals. These plan outlines were displayed with the associated assay information existent within 6 benches above and below that plane, and the boundary adjusted accordingly with the evident local pierce points of the economic drilling data.

Each block in the model for this update can contain up to two zone codes and zone percent items representing the low-and high-grade zones. This approach will more accurately represent material type volumes and grades when both low and high-grade material exists together within a single block. The bench outlines for the low-grade zones were first loaded into the block model. The solids produced during the development of the high-grade veins were next loaded over the low-grade. Finally the internal waste/voids shapes were loaded into the block model to take precedence over all other material. Each block received the appropriate ZONE codes and percent of that ore zone for tonnage determination inside that block. The remainder of the block is waste when the total percent of ore is less than 100%.

All composites receive a specific ZONE code so that during interpolation, only same ZONE code data within an ellipsoid used to gather the closest same ZONE code composite data for grade extension. This simply means that high-grade data may only be used in high-grade zone and low-grade data can only be used in low-grade zone. This prohibits high-grade data bleeding into low-grade zones and uplifting grade expectations, and by the same restriction ensuring that adjacent low grade values do not artificially overwhelm thin grade zones and severely dilute the high-grade vein material.

### 17.5 Grade Estimation

The grade values for silver and gold employed Inverse Distance Weighted power 3 (IDW3) methodology utilizing zone matching. Up to eight closest composites were used for the block grade extensions for the Northeast area, and up to 18 closest composites were used for the block grade extensions for the PRG trend areas.

Outlier restriction methodology was imposed to limit the effect of outlier grades of gold and silver. As discussed in previous chapters of this instrument, gold and silver were computed individually within each low and high-grade zone. Distance to the nearest composite and number of composites used in each of the ore zones were stored into each model block to be used in resource classification.

The resulting calculated resource model is summarized at the economic cutoff for the open pit areas and separately for the underground resources.

The implementation of the interpolation plan was checked for all zones within areas for all metals and found to have executed properly.

#### 17.6 Validation

Mintec reviewed model IDW3 silver and gold values in section and plan view. The values were inspected with respect to surrounding drill hole composite data values and overall distribution. All restricted outlier cases were examined. Mintec found that the overall model grades for both the Northeast and PGR trend honored the drill hole composite data and that the resulting distribution was reasonable. The restricted outliers handled the values properly.

Inspection of the model and drill hole data in plan and in sections, together with the spatial statistical work showed reasonable geologic and grade continuity within the main areas of mineralization of all deposits. It can be said that even though the geological interpretation plan has segmented the PGR trend into four areas, there is substantial evidence that especially in the roughly two kilometer strike length on which the Conico, Refugio and Plaza de Gallos deposits are found, these deposits probably represent continuation of the same vein structures. The existing drilling grid over the PGR Trend is about a nominal 40 to 50 meters on and between sections. The area covered by this data spacing demonstrates sufficient confidence to be classified as Indicated Mineral Resource. Within the nominal 40-50 meter drill grid, additional local areas demonstrate good geologic and grade continuity where the sample spacing was about 20 to 30 meters. Blocks in these regions can be considered to demonstrate confidence to allow classification to Measured mineral resource.

#### 17.7 Mineral Resources

Below are the resources summarized as measured and indicated classifications by Area at a 3.0 g/t cutoff for the Northeast area, and at a 0.20 g/t cutoff for the Open Pit areas on the PRG trend. The description of the PGR trend as the open pit area has been confirmed as amenable to open pit exploitation using Kappes Cassidy and Associates suggested heap leach process costs, and estimated Mexican mining costs.

Measured resource classification is defined as up to 25 meters from the closest composite and Indicated 75 meters from the closest composite for the open pit model. The inferred classification, when appropriate to describe the underground resources over a very wide area, are those tonnages where the distance to the closest composite is greater than 75 meters.

The inferred resource classification for the Northeast area, and deep vein potential at greater than 3.0 g/t gold equivalent on the PGR trend is summarized as a separate table below:

The updated resource calculation, as illustrated in the tables below, contains 2.876-million gold ounces and 133.368-million silver ounces in the measured and indicated categories and a further 2.950-million gold ounces and 161.885-million silver ounces in the inferred category. On a gold-equivalent basis, the updated resource at the Ocampo Project contains approximately 5.097-million ounces in the measured and indicated categories and 5.687-million ounces in the inferred category.

**Table 17.6 – Ocampo District Mineral Resource Summary** 

|                              | Total Ocampo Mineral Resources |                 |                             |            |                |                  |                           |  |  |  |  |
|------------------------------|--------------------------------|-----------------|-----------------------------|------------|----------------|------------------|---------------------------|--|--|--|--|
| Project Area                 | Gold<br>(gpt)                  | Silver<br>(gpt) | Gold<br>Equivalent<br>(gpt) | Tonnes     | Gold<br>Ounces | Silver<br>Ounces | Gold Equivalent<br>Ounces |  |  |  |  |
|                              |                                | 0.40            | 0.50                        | 4 500 000  | 000 000        | 44.044.000       | 400.000                   |  |  |  |  |
| Northeast Area Measures      | 5.47                           | 242             | 9.50                        | 1,529,000  | 269,000        | 11,911,000       | 468,000                   |  |  |  |  |
| Open Pit Area Measured       | 0.79                           | 36              | 1.39                        | 38,330,000 | 974,000        | 44,369,000       | 1,713,000                 |  |  |  |  |
| Total Measured               | 0.97                           | 44              | 1.70                        | 39,859,000 | 1,243,000      | 56,280,000       | 2,181,000                 |  |  |  |  |
|                              |                                |                 |                             |            |                |                  |                           |  |  |  |  |
| Northeast Area Indicated     | 4.10                           | 197             | 7.40                        | 3,389,000  | 447,000        | 21,438,000       | 802,000                   |  |  |  |  |
| Open Pit Area Indicated      | 0.91                           | 43              | 1.62                        | 40,532,000 | 1,186,000      | 55,650,000       | 2,114,000                 |  |  |  |  |
| Total Indicated              | 1.16                           | 55              | 2.10                        | 43,921,000 | 1,633,000      | 77,088,000       | 2,916,000                 |  |  |  |  |
| Total Measured and Indicated | 1.07                           | 50              | 1.90                        | 83 780 000 | 2 876 000      | 133,368,000      | 5,097,000                 |  |  |  |  |
| Total Measured and mulcated  | 1.07                           | 30              | 1.90                        | 00,700,000 | 2,010,000      | 133,300,000      | 5,037,000                 |  |  |  |  |
| Northeast Area Inferred      | 4.26                           | 234             | 7.90                        | 13,556,000 | 1,870,000      | 99,820,000       | 3,573,000                 |  |  |  |  |
| Open Pit Area Inferred       | 2.13                           | 122             | 3.81                        | 15,769,908 | 1,080,000      | 62,065,000       | 2,114,000                 |  |  |  |  |
| Total Inferred               | 3.13                           | 172             | 6.00                        | 29,325,908 | 2,950,000      | 161,885,000      | 5,687,000                 |  |  |  |  |

The above was calculated using gold-equivalent cutoff grades of 3.0 g/t for Northeast underground and 0.2 g/t for open-pit area. Gold-equivalent values are based on 60 grams of silver = 1 gram of gold, calculated on a gold price of US \$450 and a silver price of US \$7.50. Note also that the numbers in the table may not tally perfectly due to rounding.

#### 17.8 Mineral Reserves

The basis for the reserve material is the Learchs-Grossman pit optimization (LGPO) methodology using prices, costs and recoveries provided by Gammon Lake Resources and Kappes Cassidy & Associates. The prices, costs and recoveries used are as follows:

### **Prices**

| Gold price (\$/oz)   | 450.00 (\$14.47/gm) |
|----------------------|---------------------|
| Silver price (\$/oz) | 7.50 (\$0.25/gm)    |

### Costs

| Mining (\$/tonne of material)     | 1.00 |
|-----------------------------------|------|
| Pad Development (\$/tonne of ore) | 0.50 |
| Processing                        |      |
| Low-grade ore (\$/tonne of ore)   | 1.50 |
| High-grade ore (\$/tonne of ore)  | 1.85 |

### **Total Cost**

| Low-grade ore (  | \$/tonne of oi | re) | 3.00 |
|------------------|----------------|-----|------|
| High-grade ore ( | \$/tonne of o  | re) | 3.35 |

| Recovery (%)   | Gold | Silver |
|----------------|------|--------|
| Low-grade ore  | 77   | 48     |
| High-grade ore | 87   | 72     |

Two pit optimizations were conducted. The first included only measured and indicated classified material to determine the ultimate pit geometry without roads that can be used as a guideline for pit design with roads. A second optimization was run using all measured, indicated and inferred material to determine the largest aerial extent of an ultimate pit in order to determine better locations for waste dumps and other facilities.

The proven and probable reserves of the open pit area based on the LGPO are shown in the table below.

**Table 17.7 – PGR Open Pit Area Reserves** 

|                                 | Proven and Probable Reserves at the Open Pit Area |               |           |            |                |                  |               |  |  |  |
|---------------------------------|---|---------------|-----------|------------|----------------|------------------|---------------|--|--|--|
|                                 | Gold (gpt   | Silver (gpt)  | eAu (gpt) | Tonnes     | Gold<br>Ounces | Silver<br>Ounces | eAu<br>Ounces |  |  |  |
| Proven Reserves                 |   |               |           |            |                |                  |               |  |  |  |
| Low-Grade Open Pit              | 0.24  | 8             | 0.4       | 19,370,000 | 149,000        | 5,232,000        | 236,000       |  |  |  |
| High-Grade Open Pit             | 1.73  | 83            | 3.1       | 13,775,000 | 766,000        | 36,673,000       | 1,379,000     |  |  |  |
| Probable Reserves               |   |               |           |            |                |                  |               |  |  |  |
| Low-Grade Open Pit              | 0.22  | 8             | 0.4       | 10,199,000 | 72,000         | 2,755,000        | 118,000       |  |  |  |
| High-Grade Open Pit             | 1.73  | 80            | 3.1       | 14,385,000 | 800,000        | 37,003,000       | 1,417,000     |  |  |  |
| Total Proven and Probable       | 0.96  | 44            | 1.7       | 57,729,000 | 1,788,000      | 81,753,000       | 3,151,000     |  |  |  |
| Waste Material is 182,477,000 t | onnes at a Strip                                  | Ratio of 3.10 | 6:1       |            |                |                  |               |  |  |  |

The potential incremental measured and indicated resources below the above LGPO are shown in the table below.

**Table 17.8 – PGR Open Pit Area Incremental Reserves** 

| Remaining  | Remaining Measured and Indicated Resource |        |       |           |          |         |           |         |  |  |  |  |
|------------|---|--------|-------|-----------|----------|---------|-----------|---------|--|--|--|--|
|            | Gold                                      | Silver | eAu   | Tannaa    | <b>T</b> |         | Silver    | eAu     |  |  |  |  |
|            | (gpt)                                     | (gpt)  | (gpt) | Tonnes    |          | Ounces  | Ounces    | Ounces  |  |  |  |  |
|            |   |        |       |           |          |         |           |         |  |  |  |  |
| Measured   | 0.35                                      | 19     | 0.7   | 1,667,000 |          | 19,000  | 1,038,000 | 36,000  |  |  |  |  |
| Indicated  | 0.62                                      | 40     | 1.3   | 4,389,000 |          | 87,000  | 5,642,000 | 181,000 |  |  |  |  |
| Total Meas | 0.55                                      | 34     | 1.1   | 6,056,000 |          | 106,000 | 6,680,000 | 217,000 |  |  |  |  |

The proven and probable reserves for the northeast and open pit areas are shown in the tables below.

**Table 17.9 – Northeast Area Proven and Probable Reserves** 

|                             | Gold<br>(g/t) | Silver<br>(g/t) | Gold<br>Equivalent<br>(g/t) | Tonnes    | Gold<br>Ounces | Silver<br>Ounces | Gold<br>Equivalent<br>Ounces |
|-----------------------------|---------------|-----------------|-----------------------------|-----------|----------------|------------------|------------------------------|
| Proven Reserves             |               |                 |                             |           |                |                  |                              |
| Northeast Underground       | 4.70          | 220             | 8.4                         | 1,569,000 | 237,000        | 11,052,000       | 421,000                      |
| Probable Reserves           |               |                 |                             |           |                |                  |                              |
| Northeast Underground       | 4.38          | 219             | 8.0                         | 2,385,000 | 336,000        | 16,778,000       | 616,000                      |
|                             | •             |                 |                             |           | •              | •                | •                            |
| Total Northeast Underground | 4.51          | 219             | 8.2                         | 3,954,000 | 573,000        | 27,830,000       | 1,037,000                    |

**Table 17.10 – Ocampo Proven and Probable Reserves** 

| Ocampo Proven & Probable Reserves |               |                 |                  |            |           |             |            |  |
|-----------------------------------|---------------|-----------------|------------------|------------|-----------|-------------|------------|--|
|                                   |               |                 | Gold             |            |           |             | Gold       |  |
| Project Area                      | Gold<br>(g/t) | Silver<br>(g/t) | Equivalent (g/t) | Tonnes     | Gold      | Silver      | Equivalent |  |
|                                   |               |                 |                  |            | Ounces    | Ounces      | Ounces     |  |
| Northeast Area                    | 4.51          | 219             | 8.2              | 3,954,000  | 573,000   | 27,830,000  | 1,037,000  |  |
| Open Pit Area High Grade          | 1.73          | 81              | 3.1              | 28,160,000 | 1,566,000 | 73,633,000  |            |  |
| Open Pit Area Low Grade           | 0.23          | 8               | 0.4              | 29,569,000 | 221,000   | 7,987,000   | 354,000    |  |
|                                   |               |                 |                  |            |           |             |            |  |
| Total Ocampo                      | 1.19          | 55              | 2.1              | 61,683,000 | 2,360,000 | 109,450,000 | 4,184,000  |  |

January, 2006

### 18.0 References

Article 31, Section 1 of the "LEY GENERAL DEL EQUILIBRIO ECOLOGICO Y LAPROTECCION AL AMBIENTE EN MATERIA DE IMPACTO AMBIENTAL." ANEXO 1, THE NOM-120-ECOL-1997

Behre Dolbear de Mexico, 1997, Qualifying Report of the Minera Fuerte Mauo Group of Claims, Ocampo, Chihuahua, Mexico for Vetta Ventures Inc.

Behre Dolbear de Mexico, 1999, Qualifying Report of the Minera Fuerte Mayo Group of Claims, Ocampo, Chihuahua, Mexico, Behre Dolbear de Mexico, S.A. de C.V., March, 1999

Brockoven, Neil T., 1980, Reconnaissance Geology of the Yécora-Ocampo area, Sonora and Chihuahua, Mexico. Unpublished Masters Thesis.

Buchanan, L.J., 1981, Precious metal deposits associated with volcanic environments in the southwest: Arizona Geological Society Digest, v. 14, p. 237-262.

Byington, C.B. and Bybee, R.W., 2000, An Integrated Structural Analysis and Target Identification of the Ocampo Gold-silver Project, Chihuahua, Mexico, Millennium Mining Associates: For Gammon Lake Resources, Inc., Internal Unpublished Report.

Cárdenas Vargas, José, Editor, 1994, Monografia Geológica-Minera del Estado de Chihuahua, Consejo de Recursos Minerales, Publication M-14e, SEMIP.

8. Computer Aided Geosciences, 1998, Preliminary Resource Study for Ocampo Gold/Silver Project, Chihuahua, Mexico: Prepared for La Reina Resources, Internal Company Report.

Clark, Glenn, 2004, Ocampo Gold-Silver Project Review, March 31, 2004

Consejo de Recursos Minerales, 1994, Monografia Geologico-Minero del Estado de Chihuahua; Consejo de Recursos Minerales, Pub. no. M-14E, Pichuca, hgo., Mexico, 297p.

Davies, R., 1999, Ocampo Gold Silver Project, Drilling Program January-February 1999, Chihuahua, Mexico, for: Augusta Resource Corporation, April 13, 1999.

De la Fuente Lavalle, Fernando and Padilla Palma, Manuel, Editors, 1995, Estudio Evaluativo para el Desarrollo Minero del Distrito Ocampo, Chihuahua, Mexico. Consejo de Recursos Minerales.

Emmons, William H., 1937, Gold Deposits of the World. MacGraw-Hill Publishers.

Gammon Lake Resources Inc., 1998, Minera Fuerte Mayo Claim Grop, Executive Summary. Unpublished Internal Company Report, Ocampo, Chihuahua, Mexico.

Gammon Lake Resources Inc., 1999, Sampling at Minera Fuerte Mayo Claim Group, Unpublished Company Report, Ocampo, Chihuahua, Mexico.

Gammon Lake Resources, Inc., 2001, Annual Information Form, December 20, 2001.

Henry, C.D., 1975 Geology and Geochronology of the Granitic Batholith Complex, Sinaloa, Mexico: Ph.D. dissertation, University of Texas, Austin, 158p.

Henry, C.D., and Aranda-Gomex, J.J., 1992, The Real Southern Basin and Range: Midto late Cenozoic extension in Mexico: Geology, v. 20 p. 701-704.

Heurisitac Ambiental, 2004, Manifestacion de Impacto (MIA)

Heuristica Ambiental, 2004, Estudio Ambiental Modalidad Analisis Detallado de Riesgo

Kappes, Cassiday & Associates, 1998, Ocampo Project Final Report of Cyanide Leach Tests, January 1998, Prepared for: La Reina Resources, Internal Company Report.

Kappes, Cassiday & Associates, 1999, Ocampo Project Results of Analyses and Bottle Roll Leach Tests, January 1999, Prepared for: Augusta Resources, Internal Company Report.

Kappes, Cassiday & Associates, 1999, Report of Bottle Roll Leach Tests, Ocampo Project, November 1999

Kappes, Cassiday & Associates, 2001, Ocampo Project Report of Metallurgical Testwork, June 2001.

Kappes, Cassiday & Associates, 2001, Ocampo Project, Heap Leach Pad and Pond, Preliminary Design and Cost Estimate, March 7, 2001.

Kappes, Cassiday & Associates, 2002, Ocampo Project Report of Metallurgical Testwork August 2002

Kappes, Cassiday & Associates, 2003, Northeast Ocampo Scoping Study Chihuahua, Mexico 500,000 Tonne Per Year CCD Mill July 2003

Kappes, Cassiday & Associates, 2004, Ocampo, Chihuahua, Underground and Surface Mines, Mill and Heap Leach, Bankable Feasibility Study

Kappes, Casiday & Associated, 2005, Unpublished on going metallurgical tests.

Knowling, R.D., 1977, The Geology and Ore Deposits of the Ocampo district, Municipio de Ocampo, Chihuahua, Mexico: M.S. Thesis, University of Iowa, 167p.

Kociumbas, Michael W., Watts, Griffis and McQuat Limited, 2001, Audit of the Resources of the Ocampo Gold-Silver Project, Mexico, For Gammon Lake Resources Inc.

La Reina-Mogul,1998, Draft, Ocampo Gold Silver Project, Project Summary Report, July 17, 1998.

Leahey, T.A., 1998, Preliminary Resource Study for Ocampo Gold/Silver Project, Chihuahua, Mexico. Prepared for La Reina Resources, Inc., by Computor Aided Geoscience, Project #14007, February 27, 1998.

Lewis Geoscience Services Inc., 1998, Reconnaissance Study of Structural Controls on Mineralization and Exploration Potential of the Minera Fuerte Mayo Claim Group, Ocampo, Chihuahua, Mexico for Vette Ventures, Inc.

Minerales de Soyopa, Undated, Brief Report on the Mining Properties Located in Ocampo, Chihuahua, Mexico: Undated Company Report by Minerales de Soyopa S.A. de C.V.

Mintec, Inc., September 2004, Ocampo Deposit Mineral Resources, Technical Report

Norman, George, 1998, Compilation Report on the Minera Fuerte Mayo Group of Claims.

Ocampo District. Ocampo, Chihuahua, Mexico for Churchill Resource Group Inc.

Pincock, Allen and Holt, 2000, The Geology and Exploration Potential of the Ocampo Project (Update) Chihuahua, Mexico, For Gammon Lake Resources.

Pincock, Allen and Holt, 2002, Ocampo Gold-Silver Project, Preliminary Assessment, Chihuahua, Mexico, For Gammon Lake Resources.

Pincock, Allen and Holt, 2003, Ocampo Gold-Silver Project Northeast Area Resources Update, Chihuahua Mexico, Technical Report

Pincock, Allen and Holt, 2004, Ocampo Gold-Silver Project Chihuahua, Mexico Northeast Area Underground Sampling Protocol

Southworth, J.R., 1905, The Mines of Mexico. Blake and Mackenzie Printers, Liverpool, England.

Swanson, E. R., 1977, Reconnaissance Geology of the Tomochic-Ocampo Area, Sierra Madre Occidental, Chihuahua, Mexico: PhD dissertation, University of Texas, Austin.

Swanson, E. R., and McDowell, F.W., 1984, Calderas of the Sierra Madre Occidental Volcanic Field, Western Mexico, Journal of Geophysical Research, V.89, p. 8787-8799.

| atcher, Howard, 1999, Ocampo gold and Silver Project, Summary Update and |  |
|--|--|
| Recommendations for Gammon Lake Resources, Unpublished Company Report    |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

### CERTIFICATE OF QUALIFICATION

- I, Abdullah Arik, B.Sc., MS, of Tucson, Arizona, hereby certify that:
- I am the Senior Project Consulting Engineer

Mintec, inc. 3544 E. Fort Lowell Road Tucson, AZ USA 85716

- I graduated with a degree in Mining and Geostatistics from the Middle East Technical University
  of Ankara in 1976. In addition, I am a graduate of the University of Arizona, Tucson, Arizona
  1982 with Master of Science.
- I am a member of the Australian Institute of Mining and Metallurgy, North American Council of Geostaticians and the American Institute of mining Engineers – SME.
- I have worked as a practicing mining engineer and geostatistician for 23 years since my graduation from university.
- 5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
- 6. I was responsible for the preparation of section entitled Mineral Resource and Mineral Reserve Estimates of the technical report entitled "Ocampo Deposit Mineral Resources and Reserves Technical Report 2006' and dated January 2006 (the "Technical Report") relating to the Ocampo Precious Metals deposits located in Chihuahua, Mexico.. During December 2005, I visited the property and spent a significant amount of time familiarizing myself with the property and mineralization of the predominant ore zones, the drill holes stored at site, the protocols for sample preparation and assay, and the assay reporting. I was the principal engineer directing the development of the ore resource model used in previous and current valuations of the Ocampo deposits. I have also assisted with the development of the current Technical report sections prepared by Mintec for Gammon Lake Resources, Inc.
- I have had prior involvement with the property that is the subject of the Technical Report. I have been involved with the Ocampo project since 2004. All technical documents concerning resource modelling, were prepared under my direction.

- 8. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which would make the Technical Report misleading.
- 9. I am independent of the Issuer applying all of the tests in section 1.5 National Instrument 43-101.
- 10. I have read National Instrument 43-101 and Form 43-101-F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated at Tucson, Arizona this \_\_\_//

Signature of Qualified Person

ABDULLAH ARIK

Print name of Qualified Person

#### CONSENT OF QUALIFIED PERSON

TO:

All Applicable Securities Regulatory Authorities

ISSUER:

Gammon Lake Resources Inc

TECHNICAL REPORT:

Ocampo Deposit Mineral Resources and Reserves - Technical Report

2006

I, Abdullah Arik, hereby grant this consent pursuant to Section 8.3 of National Instrument 43-101.

I hereby certify as follows:

- I am the "Qualified Person" responsible for the Ocampo Deposit Resources and Reserves

   Technical Report 2006, and I hereby consent to the Issuer filing the Technical Report with all applicable securities regulatory authorities and to the written disclosure of the Ocampo Resources and Mining Reserves and of extracts from a summary of the Ocampo Resources and reserves Technical Report 2006 in the written disclosure being filed.
- I confirm that I have read the written disclosure being filed and I do not have any reason
  to believe that there are any misrepresentations in the information derived from the
  Technical Report and that the written disclosure contains any misrepresentations of the
  information contained in the Technical Report.

Signed in Tucson, Arizona this 6th day of January, 2006.

Witness

Name: Fred Fest

Aladallah Anil